2001 LOUISIANA HEALTH REPORT CARD

As mandated by R.S. 40:1300.71

M.J. "Mike" Foster, Jr.
Governor

David W. Hood
Secretary, Department of Health and Hospitals

Submitted to the Governor and the Louisiana Legislature
March 26, 2001

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2001 Louisiana Health Report Card

Louisiana Department of Health and Hospitals
Office of Public Health

Madeline McAndrew
Assistant Secretary

Elizabeth Sumrall, MPA
Executive Director, Center for Health Policy, Information and Promotion

Norma Bordelon, LCSW
Acting Director, State Center for Health Statistics
Acting State Registrar

Editor
Christine Romalewski, MPH
State Center for Health Statistics

Production Staff: State Center for Health Statistics
Huei-Chia (Julyana)Cheng, MHA
Joan Borstell, MS
Shenkang Yu, MS
Maria Frontini, DVM, PhD
Ya-Hui Hsueh, MSPH
Christine Romalewski, MPH
Edna Ogada, MPH

Cynthia Franklin and Wanda Johnson
Administrative Assistants

Cover Design
Auxiliary Enterprises
Louisiana State University Medical School in New Orleans

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Department of Health and Hospitals
Office of Public Health
State Center for Health Statistics
325 Loyola Avenue, Room 106
New Orleans, LA 70112
504/568-5337

M. J. "Mike" Foster, Jr.
GOVERNOR

LOUISIANA
Department of HEALTH and HOSPITALS

David W. Hood
SECRETARY

March 2001

Dear Governor Foster and Members of the Louisiana Legislature:

On behalf of the Department of Health and Hospitals (DHH), I am pleased to present the sixth annual Louisiana Health Report Card in accordance with R.S. 40:1300.71. This legislation, as mandated in the 1995 Regular Legislative Session, has permitted DHH the opportunity to compile information on the health status of Louisiana. The Report Card provides morbidity- and mortality-related statistics, information on current assessment and prevention initiatives, and recommendations to improve the health status of the state's citizens through enhanced programming and increased access to care.

The DHH mission is to protect and promote health and to ensure access to treatment, preventive, and rehabilitative services for all citizens of the State of Louisiana. DHH is dedicated to fulfilling its mission by providing quality services in the most efficient manner possible, assisting in the development and delivery of those services by qualified providers, both public and private, and looking ahead to constantly raise our standards. The information contained in this report reinforces the importance of the DHH mission and reaffirms the Department's commitment to target resources and manpower in those areas where they are most needed.

We submit this report to you and gladly welcome feedback, in our ongoing effort to improve its usefulness. We also welcome discussion on ways in which we can work together to improve the health status of Louisiana.

Sincerely,

David W. Hood
Secretary

OFFICE OF THE SECRETARY
1201 CAPITOL ACCESS ROAD • P.O. BOX 629 • BATON ROUGE, LOUISIANA 70821-0629
PHONE#: 225/342-9509 • FAX#: 225/342-5568

Executive Summary

Monitoring the health status of a population is an essential step in evaluating the effectiveness of various health programs and in developing programmatic policy for the future. Monitoring the health status of a population relative to certain health status indicators over a number of years is an especially effective tool for health planning. Act 985 of the 1995 Louisiana Regular Legislative Session, enacting R.S. 40:1300.71, requires that the Louisiana Department of Health and Hospitals shall annually prepare a health report card relative to health and health-related issues. This annual health report card shall be submitted at least sixty days prior to each regular session.

The following pages comprise the sixth annual Health Report Card. This document reports on the overall state of health in Louisiana, addressing at a minimum the following issues:

- Health findings of major diseases
- Teenage pregnancy and birth rates
- Rates of low birth weight babies
- Suicide rates
- Sexually transmitted diseases
- Incidence of drug addictions
- Violent deaths
- Morbidity rates
- Health assessment programs and results
- Results of preventive health outreach programs
- Assessment of the state health care delivery system

The report card is divided into six major sections. The first three sections are “Population and Vital Statistics,” “Morbidity,” and “Health Assessment Programs.” These contain data relative to each health status indicator listed above for the state as a whole and for the parishes within the state. There are comparisons with prior years and with other states. In some cases, variations among different segments of the state’s population are reported.

The last three sections address current health care initiatives, the state’s health care delivery system, and future measures for health status improvement. These sections are: “Preventive Health Outreach and Service Programs,” “Louisiana State Health Care System,” and “Recommendations for Improving Health Status.”

This report is the result of efforts by individuals throughout the Department of Health and Hospitals. To contact the individual programs that contributed to this document, please refer to the listing of Program Office telephone numbers and web addresses in the “Contact Information” table in the back of the book. Many of the programs have reports available on the web for downloading through the individual program websites.

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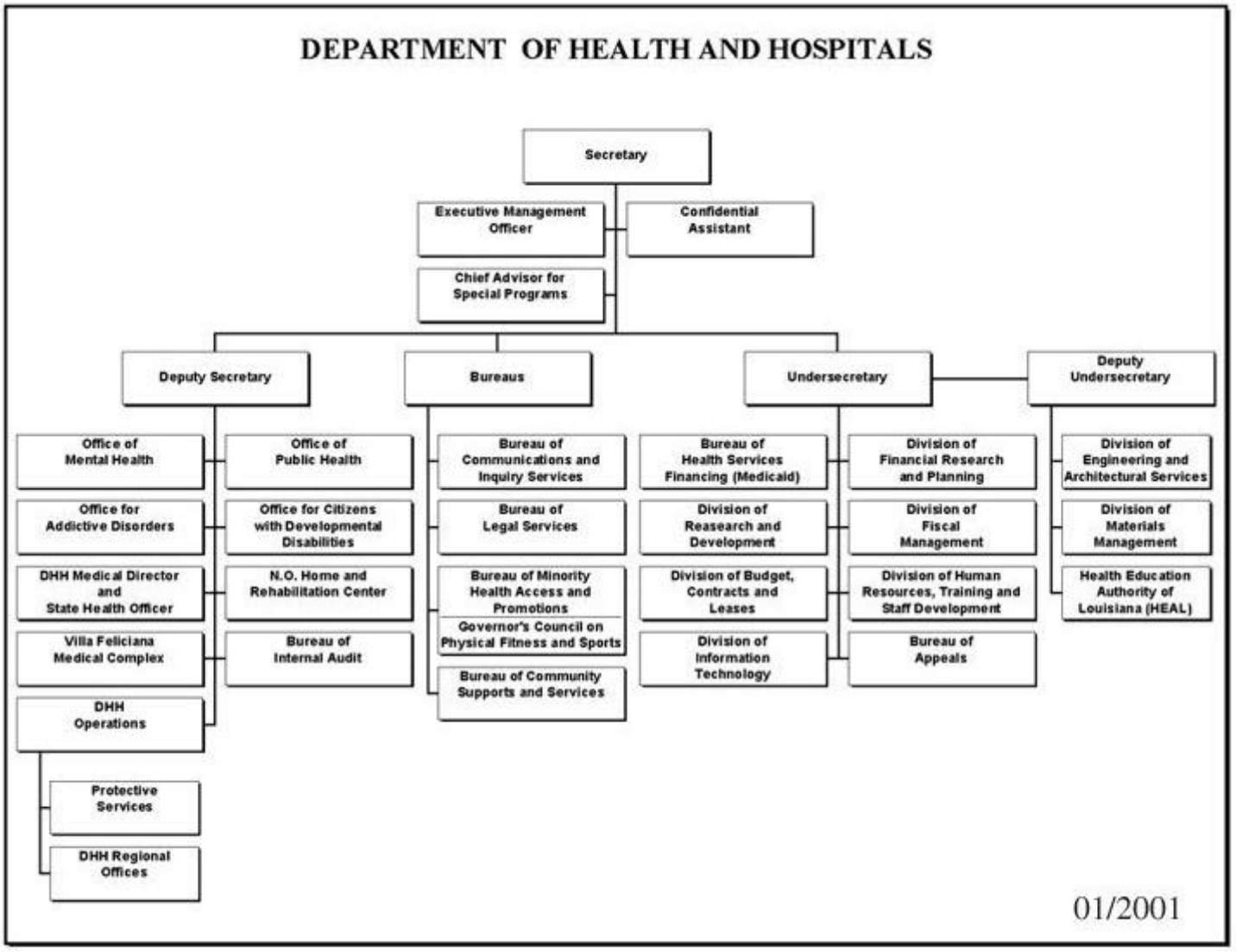
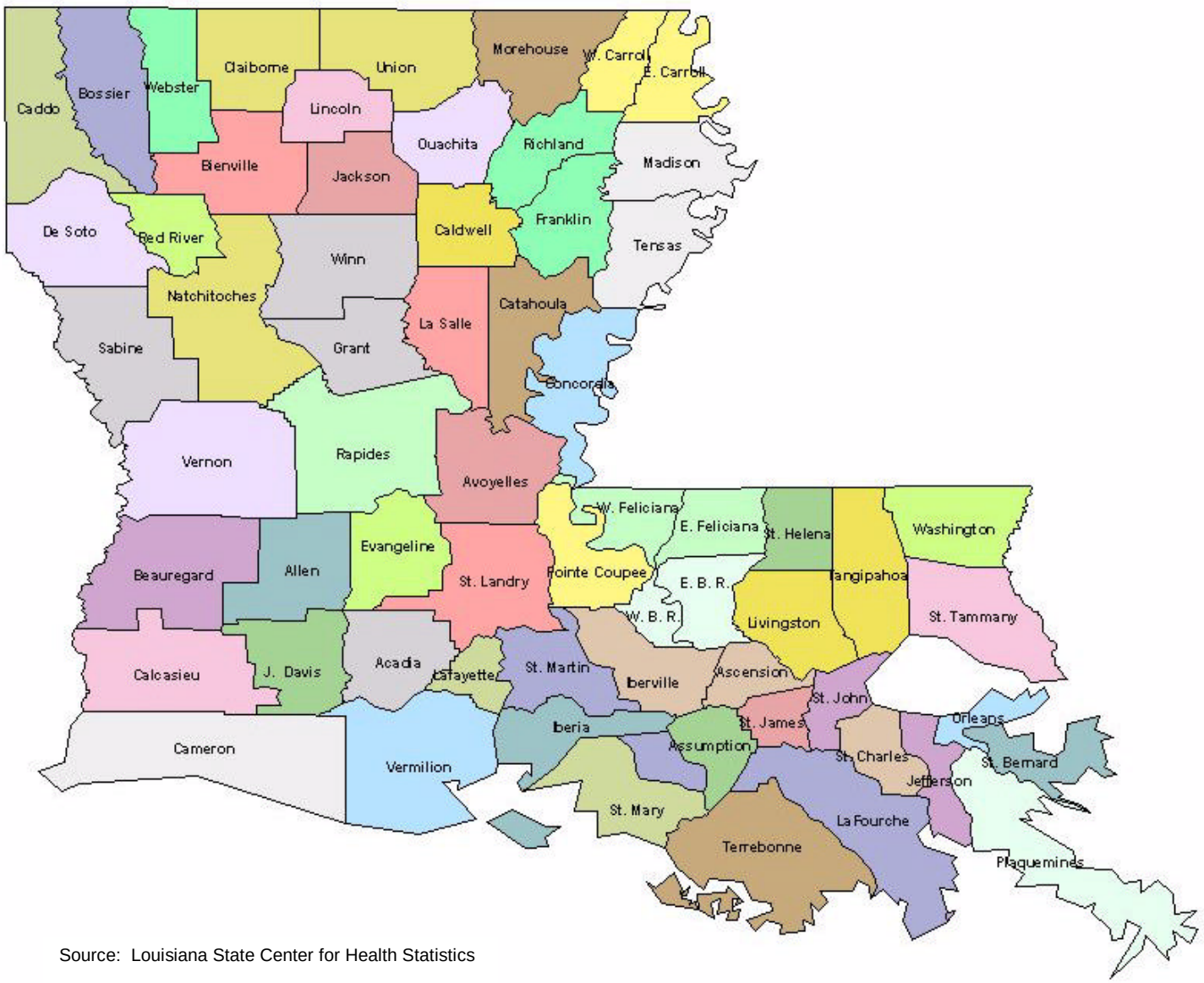


Source: www.dhh.state.la.us/orgchart.htm



Source: Louisiana State Center for Health Statistics

I. POPULATION AND VITAL STATISTICS

A. POPULATION

In 2000 the United States Census Bureau conducted its ten-year census count of the United States resident population. The results of this count are being released in stages by the Census Bureau, with the most recent release being Census Bureau 2000 Redistricting data. The redistricting data tables, which can be viewed at http://www.census.gov/Press-Release/www/2001/ tables/redist_la.html, report Louisiana's resident population to be 4,468,976 as of Census Day, April 1, 2000. Although the 2000 Redistricting tables report counts by race and Hispanic or Latino Origin, they do not include breakdowns by sex or age groups. However, for years that fall between their ten-year census counts, the Census Bureau calculates population estimates by sex, race and age group. It is the 1999 population estimates for sex, race, and age group that are being used as the source of the subpopulation figures cited in this chapter.

Census Bureau 1999 population estimates report the state's population to be 4,372,035 as of July 1, 1999. Estimates for Louisiana's basic demographic subgroups (i.e. race, sex, and age groups at state and parish levels) can be found at www.dhh.state.la.us/OPH/statctr/default.htm. The state's subgroup estimates are given in the following table.

Louisiana Population Estimates, 1999

Sex	Race	Age Group						
		<5	5-19	20-44	45-64	65-84	85+	Total
Male	White	93,446	306,008	516,956	334,052	144,143	11,842	1,406,447
	Black	62,999	205,764	235,858	110,575	41,126	4,350	660,672
	Other	3,431	10,386	14,336	6,622	1,719	212	36,706
Female	White	89,869	292,764	519,641	349,480	195,078	29,502	1,476,334
	Black	61,230	204,313	273,372	144,420	61,451	9,737	754,523
	Other	3,175	9,805	14,541	7,534	2,033	265	37,353
Both	Total	314,150	1,029,040	1,574,704	952,683	445,550	55,908	4,372,035

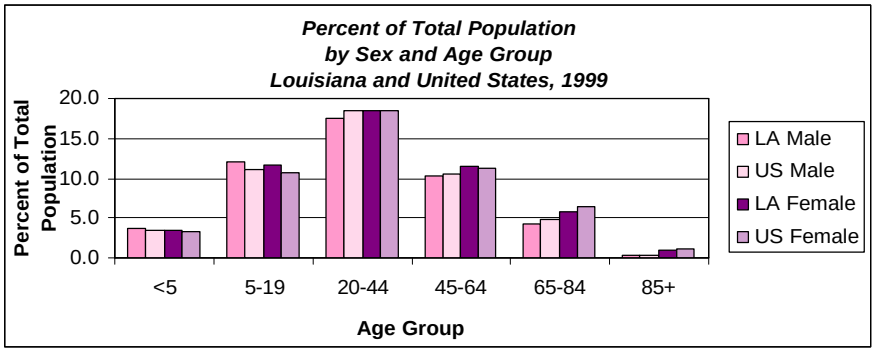
Source: United States Census Bureau, 1999 Population Estimates

Comparison of 1999 national and state population estimates show that Louisiana and the United States have very similar population distributions by sex and age group.

Percent of Total Population by Sex and Age Group
Louisiana and United States, 1999

Location	Sex	Age Group						
		<5	5-19	20-44	45-64	65-84	85+	All Ages
LA	Male	3.7	11.9	17.5	10.3	4.3	0.4	48.1
	Female	3.5	11.6	18.5	11.5	5.9	0.9	51.9
	Both	7.2	23.5	36.0	21.8	10.2	1.3	100.0
US	Male	3.6	11.1	18.4	10.5	4.8	0.5	48.9
	Female	3.4	10.6	18.5	11.2	6.3	1.1	51.1
	Both	6.9	21.7	37.0	21.7	11.1	1.5	100.0

Source: United States Census Bureau, 1999 Population Estimates



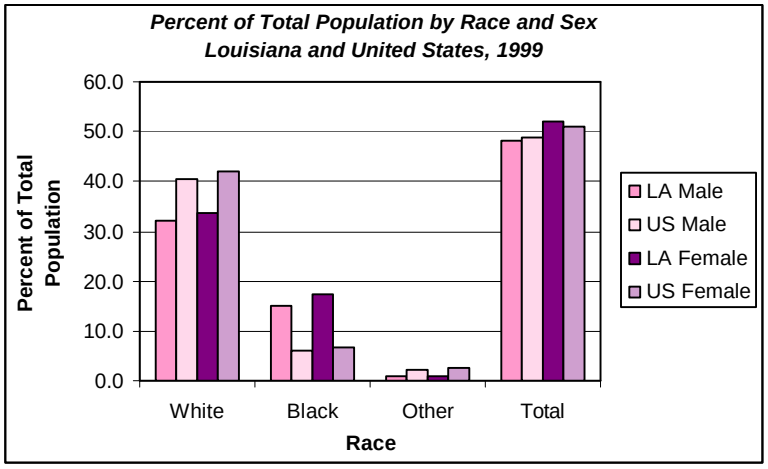
Source: United States Census Bureau, 1999 Population Estimates

Estimates of the population distribution by race, however, show the percentage of blacks in Louisiana is more than twice the national average. Blacks comprise 32.4% of the state's population, versus 12.8% nationally. Individual parishes in Louisiana range from 5% to 67% black.

Percent of Total Population by Race and Sex
Louisiana and United States, 1999

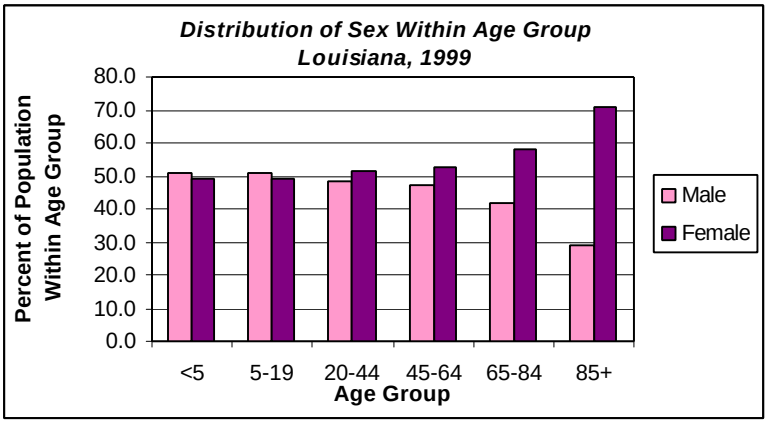
Location	Sex	Race			
		White	Black	Other	Total
LA	Male	32.2	15.1	0.8	48.1
	Female	33.8	17.3	0.9	51.9
	Both	65.9	32.4	1.7	100.0
US	Male	40.5	6.1	2.3	48.9
	Female	41.9	6.7	2.5	51.1
	Both	82.4	12.8	4.8	100.0

Source: United States Census Bureau, 1999 Population Estimates



Source: United States Census Bureau, 1999 Population Estimates

As in the rest of the nation, advancing age brings an increase in the proportion of women to men. Louisiana's 1999 population estimates for the 45 to 64 years age group are 47% male and 53% female. The percentages change to 29% male and 71% female in the 85+ age group.



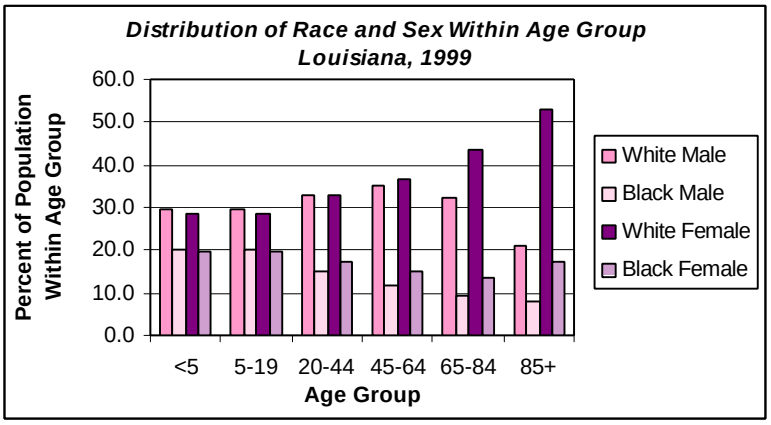
Source: United States Census Bureau, 1999 Population Estimates

Within individual age groups, the race/sex proportions change with advancing age. Prior to age 20, both white males and white females comprise approximately 29% of the population of each age group and black men and women approximately 20%. By age 85+, 53% of the population are white women, 21% are white men, 17% are black women, and 8% are black men.

Percent of Race and Sex Within Age Group
Louisiana, 1999

Sex	Race	Age Group					
		<5	5-19	20-44	45-64	65-84	85+
Male	White	29.7	29.7	32.8	35.1	32.4	21.2
	Black	20.1	20.0	15.0	11.6	9.2	7.8
	Other	1.1	1.0	0.9	0.7	0.4	0.4
	Total	50.9	50.7	48.7	47.4	42.0	29.3
Female	White	28.6	28.5	33.0	36.7	43.8	52.8
	Black	19.5	19.9	17.4	15.2	13.8	17.4
	Other	1.0	1.0	0.9	0.8	0.5	0.5
	Total	49.1	49.3	51.3	52.6	58.0	70.7

Source: United States Census Bureau, 1999 Population Estimates



Source: United States Census Bureau, 1999 Population Estimates

The United States Census Bureau has calculated parish-level population estimates for 1999. The changes in Louisiana's parish populations that occurred between the 1990 census and the 1999 estimates are given in the table below.

1999 Population Figures for Louisiana Parishes

Parish	4/1/90 Census	7/1/99 Estimate	% Change 1990-99	7/1/99 % of State
Louisiana	4,221,826	4,408,377	4.2	100.0
Acadia	55,882	57,947	3.6	1.3
Allen	21,226	24,218	12.4	0.6
Ascension	58,214	74,049	21.4	1.7
Assumption	22,753	23,242	2.1	0.5
Avoyelles	39,159	40,710	3.8	0.9
Beauregard	30,083	32,265	6.8	0.7
Bienville	16,201	15,739	-2.9	0.4
Bossier	86,088	93,374	7.8	2.1
Caddo	248,253	241,502	-2.8	5.5
Calcasieu	168,134	180,607	6.9	4.1
Caldwell	9,806	10,469	6.3	0.2
Cameron	9,260	8,969	-3.2	0.2
Catahoula	11,065	10,905	-1.5	0.2

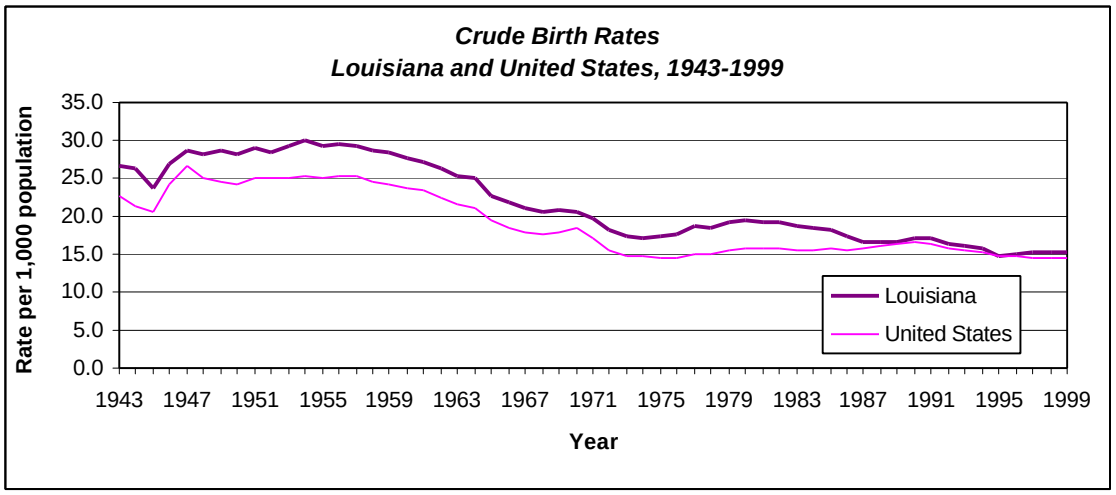
1999 Population Figures for Louisiana Parishes				
Parish	4/1/90 Census	7/1/99 Estimate	% Change 1990-99	7/1/99 % of State
Claiborne	17,405	16,826	-3.4	0.4
Concordia	20,828	20,572	-1.2	0.5
DeSoto	25,699	25,146	-2.2	0.6
E. Baton	380,105	393,294	3.4	9.0
E. Carroll	9,709	8,719	-11.4	0.2
E. Feliciana	19,211	21,119	9.0	0.5
Evangeline	33,274	34,329	3.1	0.8
Franklin	22,387	21,993	-1.8	0.5
Grant	17,526	19,211	8.8	0.4
Iberia	68,297	73,425	7.0	1.7
Iberville	31,049	31,357	1.0	0.7
Jackson	15,924	15,449	-3.1	0.4
Jefferson	448,306	447,790	-0.1	10.2
Jefferson	30,722	31,423	2.2	0.7
Lafayette	164,762	187,403	12.1	4.3
Lafourche	85,860	89,463	4.0	2.0
LaSalle	13,662	13,705	0.3	0.3
Lincoln	41,745	41,129	-1.5	0.9
Livingston	70,523	91,182	22.7	2.1
Madison	12,463	12,987	4.0	0.3
Morehouse	31,938	31,242	-2.2	0.7
Natchitoches	37,199	37,198	0.0	0.9
Orleans	496,938	460,913	-7.8	10.5
Ouachita	142,191	146,672	3.1	3.4
Plaquemines	25,575	26,094	2.0	0.6
Pointe	22,540	23,440	3.8	0.5
Rapides	131,556	126,775	-3.8	2.9
Red River	9,518	9,489	-0.3	0.2
Richland	20,629	21,082	2.1	0.5
Sabine	22,646	23,812	4.9	0.5
St. Bernard	66,631	65,406	-1.9	1.5
St. Charles	42,437	48,640	12.8	1.1
St. Helena	9,874	9,607	-2.8	0.2
St. James	20,879	21,197	1.5	0.5
St. John	39,996	42,494	5.9	1.0
St. Landry	80,312	84,243	4.7	1.9
St. Martin	44,097	47,645	7.4	1.1
St. Mary	58,086	56,795	-2.3	1.3
St. Tammany	144,500	192,945	25.1	4.4
Tangipahoa	85,709	98,285	12.8	2.2
Tensas	7,103	6,539	-8.6	0.1
Terrebonne	96,982	105,128	7.7	2.4
Union	20,796	22,165	6.2	0.5
Vermilion	50,055	52,258	4.2	1.2
Vernon	61,961	51,567	-20.2	1.2
Washington	43,185	43,162	-0.1	1.0
Webster	41,989	42,797	1.9	1.0
W. Baton	19,419	20,421	4.9	0.5
W. Carroll	12,093	12,175	0.7	0.3
W. Feliciana	12,915	13,833	6.6	0.3
Winn	16,496	17,498	5.7	0.4

Source: United States Census Bureau, 1999 Population Estimates

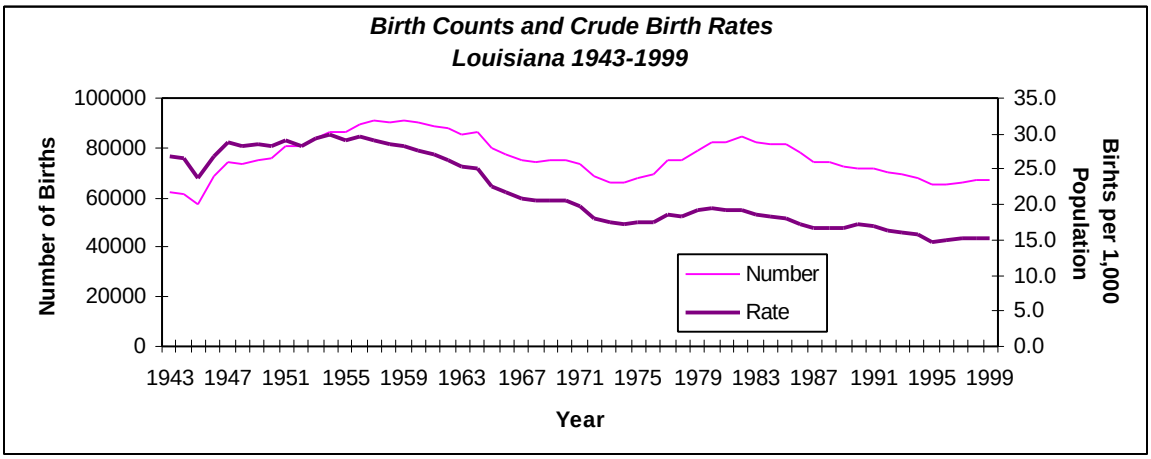
B. BIRTHS

Live Birth Counts and Birth Rates

In 1999, there were 67,034 births to Louisiana residents. This marked a slight increase from the number of Louisiana births in 1998 (up 0.4%), and matched the percent increase seen at the national level in the number of births in 1999 versus 1998. Louisiana's 1999 crude birth rate was 15.3 live births per 1,000 population. Because the crude birth rate relates the number of live births to the total population in an area, without regard to the age or sex distribution of the population, it is useful as a measure of the contribution of births to the growth of the population of the area.[1] Louisiana's 1999 crude birth rate was unchanged from 1998, and was slightly higher than the 1999 national rate (preliminary data) of 14.5 per 1,000 population.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1999 data)



Source: Louisiana State Center for Health Statistics

[1] Clarke SC and Ventura SJ. *Birth and Fertility for States: United States*, 1990. National Center for Health Statistics. Vital Health Stat 21(52), 1994.

In the table below, crude birth rates are furnished to compare Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1999 rate is available and is reported in this document, National Center for Health Statistics preliminary 1999 data for all states have been used in the table below to permit comparison with surrounding states.) Louisiana continues to rank in the top third of the country in terms of birth rate. The state's 1999 ranking of 11th highest in the nation equals its 1998 ranking. Among neighboring states, Louisiana's birth rate ranks in the middle.

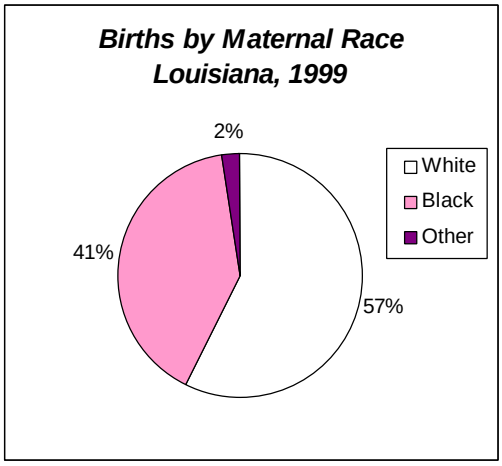
Crude Birth Rates
Louisiana, Neighboring States, and United States, 1999

State	Birth Rate*	National Ranking
Alabama	14.2	22
Arkansas	14.4	18
Louisiana	15.3	11
Mississippi	15.4	10
Texas	17.3	2
United States	14.5	-

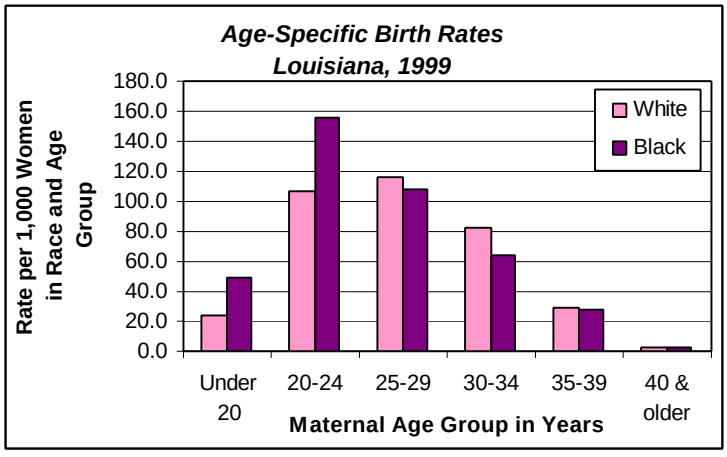
*Rate per 1,000 population
Source: National Center for Health Statistics

Although blacks represent only 32% of the population of Louisiana, 41% of the state's live births in 1999 were to black mothers. The birth rate for whites is 13.3 per 1,000 population while that of blacks is 19.2. Much of the disparity seems to occur in women under the age of 25. Although birth rates for both racial groups peak in the twenties, the birth rate for blacks is much higher for mothers less than 25 years old than for whites of comparable age. After the age of 25, birth rates become more similar.

There is also disparity among parishes in terms of birth rate. In 1999 Vernon parish had the highest rate at 21.9 births per 1,000 population. This was almost twice the rate of Bienville (11.0), the parish with the lowest birth rate.

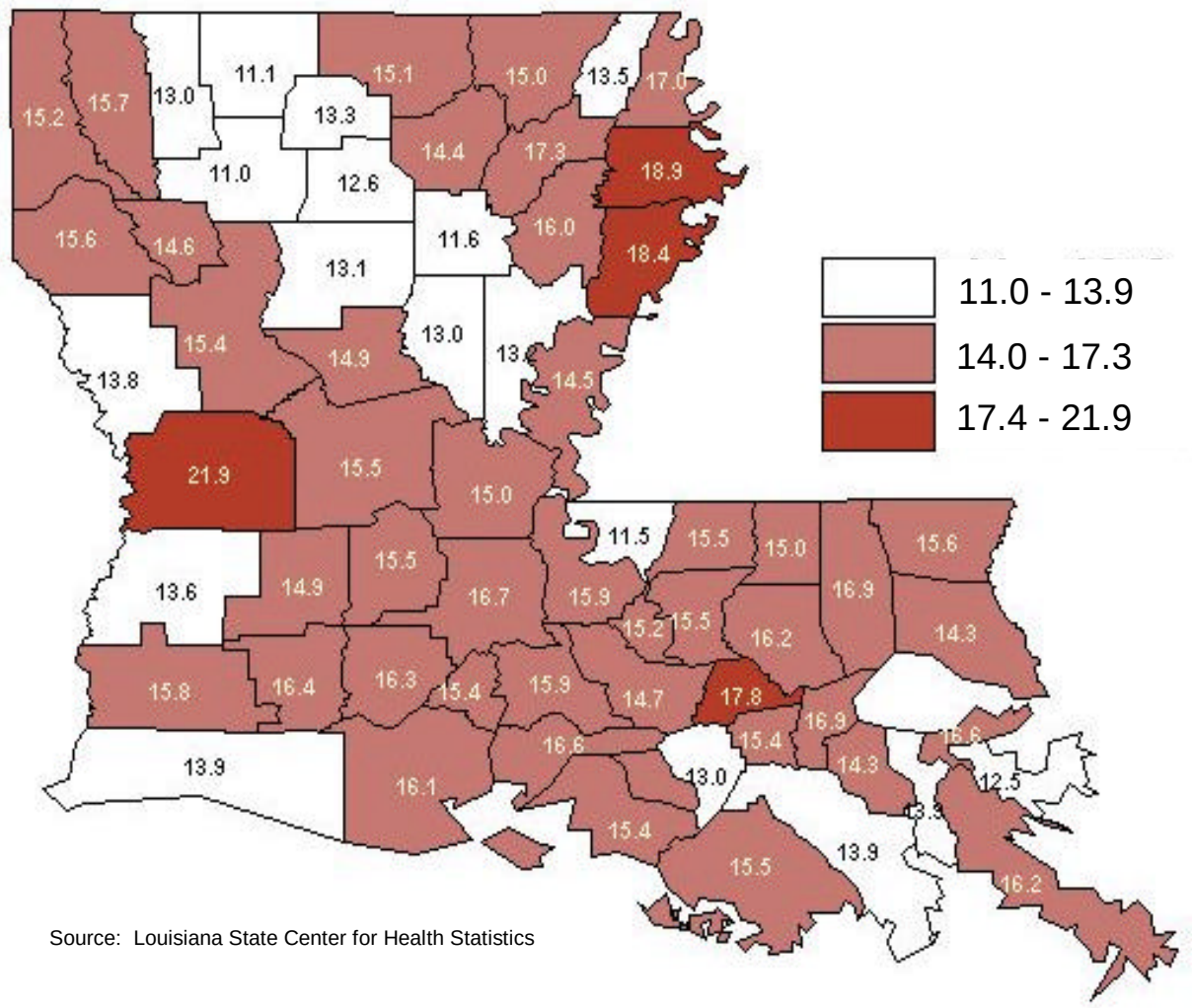


Source: Louisiana State Center for Health Statistics



Source: Louisiana State Center for Health Statistics

Live Birth Rate Per 1,000 Population Louisiana, 1999



Source: Louisiana State Center for Health Statistics

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1999													
Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
State	67419	67034	15.3	All	266	11492	20922	16987	11438	4967	916	39	7
	38898	38350		White	35	4776	10577	11058	7964	3338	573	26	<5
	27050	27234		Black	228	6567	10020	5490	3115	1490	308	12	<5
	1471	1450		Other	<5	149	325	439	359	139	35	<5	-
Acadia	444	940	16.3	All	<5	190	335	198	140	63	11	<5	-
	303	725		White	<5	117	259	160	124	54	9	<5	-
	139	213		Black	<5	73	76	36	16	9	<5	-	-
	<5	<5		Other	-	-	-	<5	-	-	-	-	-
Allen	-	364	14.9	All	<5	61	134	94	52	17	5	-	-
	-	285		White	<5	49	96	81	41	13	<5	-	-
	-	71		Black	-	10	35	12	10	<5	-	-	-
	-	8		Other	-	<5	<5	<5	<5	-	<5	-	-
Ascension	<5	1314	17.8	All	<5	163	352	380	301	97	15	<5	-
	<5	987		White	<5	91	237	318	251	75	12	<5	-
	<5	319		Black	<5	72	114	58	47	22	<5	-	-
	-	8		Other	-	-	<5	<5	<5	-	-	-	-
Assumption	<5	297	13.0	All	<5	53	87	76	51	23	5	<5	-
	-	171		White	-	23	42	53	41	11	<5	-	-
	<5	123		Black	<5	30	42	23	10	12	<5	<5	-
	-	<5		Other	-	-	<5	-	-	-	-	-	-
Avoyelles	<5	617	15.0	All	<5	120	233	160	70	25	6	<5	-
	<5	393		White	-	64	138	116	56	15	<5	-	-
	<5	221		Black	<5	55	95	42	14	10	<5	<5	-
	-	<5		Other	-	<5	-	<5	-	-	-	-	-
Beauregard	570	433	13.6	All	<5	79	154	122	58	16	<5	-	-
	458	371		White	<5	64	125	113	52	15	<5	-	-
	101	58		Black	-	15	28	7	5	<5	<5	-	-
	11	<5		Other	-	-	<5	<5	<5	-	-	-	-
Bienville	-	171	11.0	All	<5	50	48	35	19	12	5	-	-
	-	97		White	-	15	30	28	12	8	<5	-	-
	-	74		Black	<5	35	18	7	7	<5	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Bossier	693	1485	15.7	All	8	205	464	398	278	119	13	-	-
	549	1058		White	<5	110	322	320	203	92	8	-	-
	131	400		Black	5	93	136	71	68	23	<5	-	-
	13	27		Other	-	<5	6	7	7	<5	<5	-	-
Caddo	6031	3653	15.2	All	22	677	1168	982	521	230	52	<5	-
	3117	1631		White	<5	199	410	546	308	136	30	-	-
	2823	1973		Black	20	477	750	416	199	88	22	<5	-
	91	49		Other	-	<5	8	20	14	6	-	-	-
Calcasieu	3452	2858	15.8	All	9	524	965	686	467	176	28	<5	-
	2530	2005		White	<5	312	635	549	356	125	24	<5	-
	883	819		Black	5	210	321	127	100	50	<5	<5	-
	39	34		Other	<5	<5	9	10	11	<5	-	-	-

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 1999

Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
Caldwell	<5	123	11.6	All	-	22	53	29	15	<5	-	-	-
	<5	108		White	-	19	48	26	11	<5	-	-	-
	<5	15		Black	-	<5	5	<5	<5	-	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Cameron	-	125	13.9	All	-	25	45	26	17	12	-	-	-
	-	119		White	-	24	41	26	16	12	-	-	-
	-	<5		Black	-	<5	<5	-	-	-	-	-	-
	-	<5		Other	-	-	<5	-	<5	-	-	-	-
Catahoula	-	142	13.2	All	-	44	49	28	13	7	<5	-	-
	-	82		White	-	20	31	21	7	<5	-	-	-
	-	60		Black	-	24	18	7	6	<5	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Claiborne	89	190	11.1	All	<5	46	50	44	35	12	<5	-	-
	30	79		White	-	16	23	22	13	5	-	-	-
	59	111		Black	<5	30	27	22	22	7	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Concordia	305	302	14.5	All	-	96	109	59	30	5	<5	-	-
	92	149		White	-	41	51	31	21	<5	<5	-	-
	210	150		Black	-	54	58	27	8	<5	<5	-	-
	<5	<5		Other	-	<5	-	<5	<5	-	-	-	-
Desoto	<5	396	15.6	All	<5	81	127	98	62	21	<5	-	-
	-	207		White	-	33	65	61	38	9	<5	-	-
	<5	189		Black	<5	48	62	37	24	12	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
E Baton Rouge	10241	6206	15.5	All	25	919	1695	1636	1233	584	106	8	-
	5954	2874		White	<5	174	555	892	819	356	68	8	-
	4137	3203		Black	23	734	1114	707	376	213	36	-	-
	150	129		Other	-	11	26	37	38	15	<5	-	-
East Carroll	<5	150	17.0	All	<5	42	52	34	14	6	-	-	-
	-	30		White	-	5	11	5	7	<5	-	-	-
	<5	120		Black	<5	37	41	29	7	<5	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
E Feliciana	<5	316	15.5	All	<5	59	101	80	52	21	<5	-	-
	<5	165		White	-	25	47	50	32	10	<5	-	-
	<5	151		Black	<5	34	54	30	20	11	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Evangeline	771	529	15.5	All	<5	109	191	117	81	26	<5	-	-
	462	329		White	-	53	122	88	52	14	-	-	-
	298	198		Black	<5	56	69	28	29	11	<5	-	-
	11	<5		Other	-	-	-	<5	-	<5	-	-	-
Franklin	7	348	16.0	All	<5	69	147	80	36	8	<5	-	<5
	5	203		White	-	27	82	60	24	6	<5	-	<5
	<5	143		Black	<5	42	64	20	11	<5	-	-	-
	-	<5		Other	-	-	<5	-	<5	-	-	-	-

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 1999

Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
Grant	<5	283	14.9	All	<5	54	96	75	39	14	<5	-	-
	<5	250		White	<5	48	83	66	37	12	<5	-	-
	-	31		Black	-	6	11	9	<5	<5	<5	-	-
	-	<5		Other	-	-	<5	-	-	-	-	-	-
Iberia	1139	1212	16.6	All	<5	256	377	270	207	90	9	<5	-
	673	732		White	-	112	210	183	152	71	<5	<5	-
	434	449		Black	<5	139	158	80	47	17	6	-	-
	32	31		Other	-	5	9	7	8	<5	-	-	-
Iberville	385	460	14.7	All	-	95	149	113	72	24	7	-	-
	68	217		White	-	31	59	67	46	10	<5	-	-
	315	241		Black	-	64	90	46	26	13	<5	-	-
	<5	<5		Other	-	-	-	-	-	<5	<5	-	-
Jackson	-	196	12.6	All	-	35	72	55	25	6	<5	-	<5
	-	135		White	-	21	48	42	17	6	<5	-	-
	-	60		Black	-	13	24	13	8	-	<5	-	<5
	-	<5		Other	-	<5	-	-	-	-	-	-	-
Jefferson	7842	6311	13.9	All	22	872	1674	1668	1398	563	111	<5	-
	4971	3973		White	<5	369	925	1119	1048	424	83	<5	-
	2471	1979		Black	19	472	684	438	248	101	17	-	-
	400	359		Other	<5	31	65	111	102	38	11	-	-
Jefferson Davis	327	514	16.4	All	<5	102	186	126	64	27	7	-	-
	273	398		White	<5	70	139	107	56	20	5	-	-
	54	113		Black	<5	32	46	17	8	7	<5	-	-
	-	<5		Other	-	-	<5	<5	-	-	-	-	-
Lafayette	5222	2889	15.4	All	<5	378	802	737	619	296	51	<5	-
	3619	1934		White	-	179	471	551	479	215	37	<5	-
	1513	908		Black	<5	194	320	172	129	77	12	-	-
	90	47		Other	-	5	11	14	11	<5	<5	-	-
Lafourche	1096	1237	13.9	All	<5	221	354	335	231	83	11	-	-
	945	940		White	-	135	246	288	193	70	8	-	-
	124	252		Black	<5	74	90	38	33	12	<5	-	-
	27	45		Other	-	12	18	9	5	<5	-	-	-
Lasalle	-	183	13.0	All	-	32	80	39	21	7	<5	-	-
	-	162		White	-	27	72	34	19	6	<5	-	-
	-	20		Black	-	5	8	<5	<5	<5	-	-	-
	-	<5		Other	-	-	-	<5	-	-	-	-	-
Lincoln	573	549	13.3	All	<5	89	186	144	85	34	7	-	-
	253	260		White	-	25	65	96	55	17	<5	-	-
	315	281		Black	<5	64	119	45	27	17	5	-	-
	5	8		Other	-	-	<5	<5	<5	-	-	-	-
Livingston	<5	1442	16.2	All	<5	212	451	437	237	92	10	<5	-
	<5	1356		White	<5	191	416	423	229	85	9	<5	-
	-	79		Black	-	21	33	11	8	6	-	-	-
	-	7		Other	-	-	<5	<5	-	<5	<5	-	-

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 1999

Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
Madison	<5	244	18.9	All	<5	70	77	54	29	11	<5	-	-
	-	69		White	-	15	20	17	12	5	-	-	-
	<5	175		Black	<5	55	57	37	17	6	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Morehouse	452	471	15.0	All	<5	122	164	110	45	22	<5	-	-
	272	212		White	-	42	77	59	20	12	<5	-	-
	175	256		Black	<5	80	87	50	23	10	<5	-	-
	5	<5		Other	-	-	-	<5	<5	-	-	-	-
Natchitoches	584	576	15.4	All	<5	108	237	121	74	27	5	<5	-
	307	276		White	-	42	96	77	37	22	<5	<5	-
	275	297		Black	<5	66	141	44	35	5	<5	<5	-
	<5	<5		Other	-	-	-	-	<5	-	<5	-	-
Orleans	9036	7663	16.6	All	43	1463	2404	1752	1233	638	122	6	<5
	2504	1409		White	<5	59	207	382	446	259	52	<5	<5
	6315	6062		Black	41	1400	2171	1311	719	351	63	5	<5
	217	192		Other	-	<5	26	59	68	28	7	-	-
Ouachita	3687	2139	14.4	All	17	340	689	613	314	143	22	<5	-
	2060	1128		White	<5	123	311	382	209	89	12	<5	-
	1603	994		Black	16	216	376	222	102	52	10	-	-
	24	17		Other	-	<5	<5	9	<5	<5	-	-	-
Plaquemines	<5	416	16.2	All	-	67	142	107	75	19	5	-	<5
	<5	292		White	-	44	91	84	53	14	5	-	<5
	<5	111		Black	-	22	50	20	17	<5	-	-	-
	-	13		Other	-	<5	<5	<5	5	<5	-	-	-
Pointe Coupee	<5	370	15.9	All	-	66	112	94	64	28	6	-	-
	-	208		White	-	25	52	64	45	18	<5	-	-
	<5	160		Black	-	41	59	29	19	10	<5	-	-
	-	<5		Other	-	-	<5	<5	-	-	-	-	-
Rapides	3361	1990	15.5	All	<5	390	683	487	288	121	15	<5	-
	2215	1162		White	<5	190	337	334	219	72	8	<5	-
	1105	799		Black	<5	192	343	146	62	48	5	-	-
	41	29		Other	-	8	<5	7	7	<5	<5	<5	-
Red River	<5	141	14.6	All	-	32	48	37	15	7	<5	-	-
	-	64		White	-	11	22	18	7	6	-	-	-
	<5	76		Black	-	21	26	18	8	<5	<5	-	-
	-	<5		Other	-	-	-	<5	-	-	-	-	-
Richland	<5	360	17.3	All	<5	87	136	80	36	15	<5	-	-
	-	188		White	-	36	70	47	25	8	<5	-	-
	<5	172		Black	<5	51	66	33	11	7	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Sabine	<5	320	13.8	All	-	65	112	86	35	18	<5	-	-
	<5	231		White	-	49	75	67	23	16	<5	-	-
	<5	72		Black	-	11	34	13	10	<5	<5	-	-
	-	17		Other	-	5	<5	6	<5	<5	-	-	-

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 1999

Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
St Bernard	<5	838	12.5	All	-	126	227	250	156	57	22	-	-
	<5	728		White	-	106	184	219	149	49	21	-	-
	<5	85		Black	-	19	31	25	<5	5	<5	-	-
	-	25		Other	-	<5	12	6	<5	<5	-	-	-
St Charles	<5	682	14.3	All	-	88	177	203	150	51	13	-	-
	<5	455		White	-	38	107	147	119	37	7	-	-
	<5	219		Black	-	50	69	53	29	12	6	-	-
	-	8		Other	-	-	<5	<5	<5	<5	-	-	-
St Helena	<5	134	15.0	All	-	19	46	41	21	5	<5	-	-
	<5	56		White	-	5	19	17	11	<5	<5	-	-
	-	78		Black	-	14	27	24	10	<5	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
St James	<5	330	15.4	All	<5	45	103	85	63	26	5	-	-
	<5	111		White	-	9	21	37	30	12	<5	-	-
	<5	217		Black	<5	36	82	46	33	14	<5	-	-
	-	<5		Other	-	-	-	<5	-	-	-	-	-
St John	435	705	16.9	All	<5	127	215	165	119	67	7	<5	-
	236	330		White	-	44	91	89	68	37	<5	-	-
	196	365		Black	<5	82	121	74	49	28	6	<5	-
	<5	10		Other	-	<5	<5	<5	<5	<5	-	-	-
St Landry	1229	1394	16.7	All	11	288	474	324	182	89	24	-	<5
	661	693		White	<5	121	202	192	113	57	6	-	-
	566	697		Black	9	166	270	132	68	32	18	-	<5
	<5	<5		Other	-	<5	<5	-	<5	-	-	-	-
St Martin	<5	756	15.9	All	<5	144	260	173	109	55	13	-	-
	<5	461		White	-	67	154	119	77	39	5	-	-
	<5	280		Black	<5	73	105	49	30	13	8	-	-
	-	15		Other	-	<5	<5	5	<5	<5	-	-	-
St Mary	556	879	15.4	All	5	186	310	203	128	39	8	-	-
	309	527		White	<5	89	177	140	91	24	<5	-	-
	227	309		Black	<5	88	120	55	29	12	<5	-	-
	20	43		Other	<5	9	13	8	8	<5	<5	-	-
St Tammany	3579	2694	14.3	All	<5	284	616	700	687	346	59	-	-
	2826	2269		White	-	189	474	621	621	311	53	-	-
	705	379		Black	<5	90	134	65	53	29	6	-	-
	48	46		Other	-	5	8	14	13	6	-	-	-
Tangipahoa	1617	1639	16.9	All	8	339	578	400	202	91	19	<5	-
	952	975		White	<5	152	290	293	157	67	13	<5	-
	657	652		Black	7	186	287	102	41	23	6	-	-
	8	12		Other	-	<5	<5	5	<5	<5	-	-	-
Tensas	<5	116	18.4	All	-	26	45	26	7	9	<5	-	-
	<5	35		White	-	6	16	11	-	<5	-	-	-
	<5	81		Black	-	20	29	15	7	7	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 1999

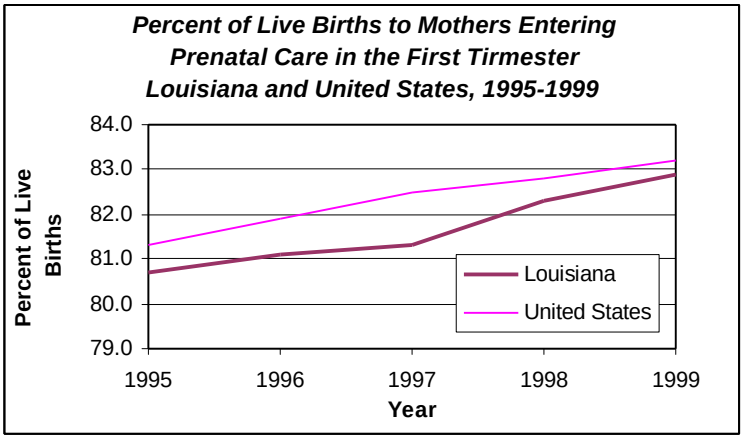
Parish And larger Cities	Total by Occurrence	Total by Residence	Rate+	Race	Age in years								
					LT 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk.
Terrebonne	2144	1620	15.5	All	6	299	524	395	275	105	15	<5	-
	1333	1126		White	<5	183	359	283	206	83	9	<5	-
	644	352		Black	<5	86	114	76	54	15	<5	-	-
	167	142		Other	-	30	51	36	15	7	<5	-	-
Union	<5	336	15.1	All	<5	57	119	85	47	23	<5	-	-
	-	195		White	-	31	64	53	32	15	-	-	-
	<5	136		Black	<5	26	53	29	15	8	<5	-	-
	-	5		Other	-	-	<5	<5	-	-	-	-	-
Vermilion	169	835	16.1	All	<5	134	253	217	150	65	13	-	-
	82	628		White	<5	89	193	170	111	55	8	-	-
	76	179		Black	<5	43	53	36	32	10	<5	-	-
	11	28		Other	-	<5	7	11	7	-	<5	-	-
Vernon	635	1042	21.9	All	-	148	434	270	130	48	12	-	-
	434	795		White	-	118	322	209	96	39	11	-	-
	156	201		Black	-	28	94	43	30	6	-	-	-
	45	46		Other	-	<5	18	18	<5	<5	<5	-	-
Washington	5	691	15.6	All	<5	130	275	165	83	29	6	-	-
	-	423		White	-	64	167	115	54	19	<5	-	-
	5	266		Black	<5	66	108	49	28	10	<5	-	-
	-	<5		Other	-	-	-	<5	<5	-	-	-	-
Webster	692	559	13.0	All	<5	105	197	150	61	34	8	-	-
	386	338		White	-	63	108	100	40	22	5	-	-
	304	219		Black	<5	42	89	49	20	12	<5	-	-
	<5	<5		Other	-	-	-	<5	<5	-	-	-	-
W Baton Rouge	-	310	15.2	All	<5	55	88	83	50	27	6	-	-
	-	184		White	<5	21	52	53	35	20	<5	-	-
	-	126		Black	-	34	36	30	15	7	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
West Carroll	<5	164	13.5	All	-	39	53	48	12	9	<5	-	-
	<5	129		White	-	29	39	43	8	7	<5	-	-
	<5	35		Black	-	10	14	5	<5	<5	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
W Feliciana	-	158	11.5	All	<5	22	51	39	30	13	<5	-	-
	-	73		White	-	<5	24	23	15	6	<5	-	-
	-	85		Black	<5	18	27	16	15	7	<5	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Winn	-	227	13.1	All	<5	41	87	63	25	10	-	-	-
	-	155		White	-	23	52	51	20	9	-	-	-
	-	72		Black	<5	18	35	12	5	<5	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Out of state	780	1165		All	<5	91	352	316	257	105	35	8	-
	405	953		White	-	71	253	277	223	91	30	8	-
	373	189		Black	<5	20	90	34	29	11	<5	-	-
	<5	23		Other	-	-	9	5	5	<5	<5	-	-

+Rate per 1,000 population
Source: Louisiana State Center for Health Statistics

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes and to identify women at high risk for these outcomes. It has been estimated that for every dollar spent on prenatal care, up to $3.38 can be saved in direct medical costs.[2] Beyond the positive effect on birth outcomes, prenatal care is a vital part of women's health care, as many women (particularly adolescents, minorities, and women of low socio-economic status) first enter the health care system during pregnancy.[3]

Prenatal care is most effective when it begins during the early stages of pregnancy. At the national level, the percentage of live births to mothers entering prenatal care in the first trimester has been steadily increasing. Louisiana, while consistently below the national percentage, has shown similar improvement.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1999 data)

In the following table, percentages of live births to mothers utilizing prenatal care are furnished to allow comparison of Louisiana with neighboring states. (As previously noted, preliminary NCHS 1999 numbers are used for cross-state comparisons.) In 1999, 82.9% of Louisiana residents who gave birth entered prenatal care in the first trimester, as compared with 83.2% of mothers in the United States. Louisiana ranked 33rd highest in the nation, and second among neighboring states, for percent of mothers receiving prenatal care in the first trimester.

Percent of Live Births to Mothers Receiving Prenatal Care in the First Trimester of Pregnancy Louisiana, Neighboring States, and United States, 1999

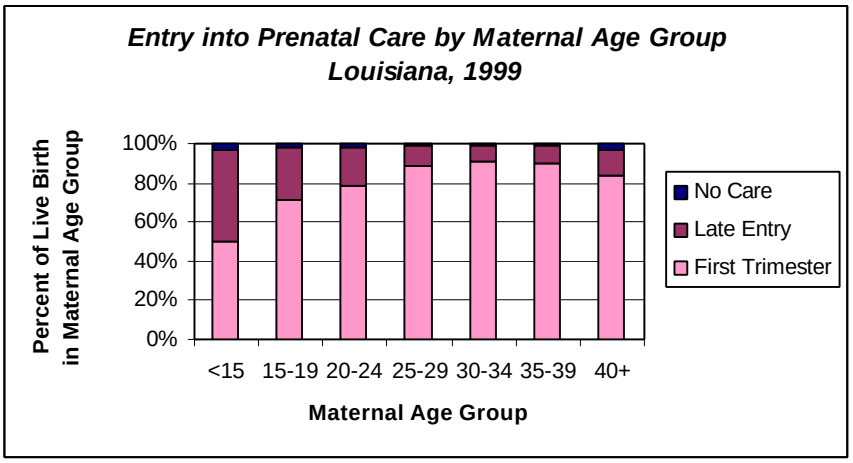
State	Percent of Mothers	National Ranking
Alabama	83.2	30
Arkansas	79.3	45
Louisiana	82.9	33
Mississippi	81.5	37
Texas	79.3	46
United States	83.2	-

Source: National Center for Health Statistics (preliminary 1999 data)

[2] Institute of Medicine. (1994). "Prenatal Care and Low Birthweight: Effects on Health Care Expenditures." In: *Preventing Low Birthweight.* (pp. 212-37) Washington, DC: National Academy Press.

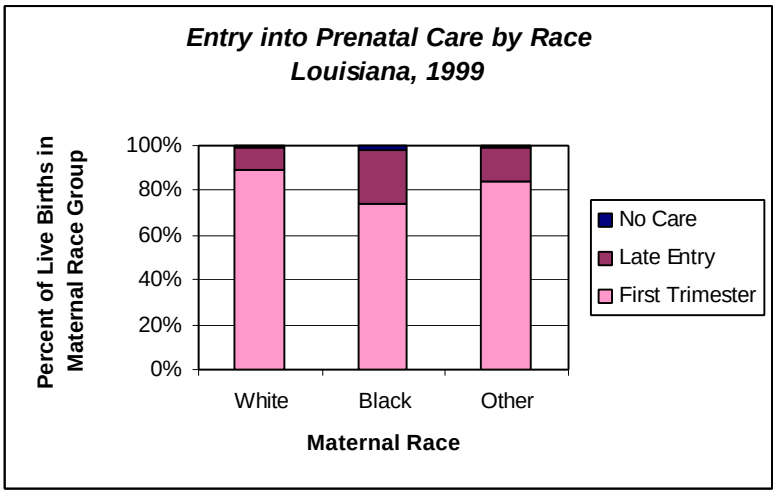
[3] Fiscella, K. (1995). "Does Prenatal Care Improve Birth Outcomes? A Critical Review." *Obstetrics & Gynecology* 85, 468-79.

Only half (50.2%) of mothers under the age of 15 started prenatal care in the first trimester of pregnancy, and 3.0% of this age group never received any prenatal care. However, entry into care improved with age before leveling off in the mid-thirties.



Source: Louisiana State Center for Health Statistics

Black women entered into prenatal care in a timely manner less frequently than whites and other races. Only 73.3% of black mothers had their first prenatal visit in the first trimester, compared with 89.8% of white mothers. Also, 2.4% of black mothers received no prenatal care, as compared with 0.6% of white mothers.



Source: Louisiana State Center for Health Statistics

In Louisiana, adequacy of prenatal care is measured by a modified Kessner index, which defines prenatal care as adequate if the first prenatal visit occurred in the first trimester of pregnancy and if the total number of visits was appropriate to the gestational age of the baby at birth. It should be noted, however, that these measures assess neither the quality nor the content of prenatal care and, therefore, are most likely overestimates of the adequacy of care. Of the 67,034 Louisiana residents who gave birth in 1999, 77.5% received adequate care.

Percent of Mothers Receiving Adequate* Prenatal Care by Parish Louisiana, 1994-1999						
Parish	1994	1995	1996	1997	1998	1999
Louisiana	71.8	73.5	74.8	75.4	76.9	77.5
Acadia	52.6	50.3	57.7	59.6	69.7	71.6
Allen	64.7	63.3	70.4	67.2	74.9	77.3
Ascension	78.3	79.5	79.1	83.0	82.7	82.8
Assumption	75.2	75.5	78.2	82.7	80.9	83.1
Avoyelles	61.1	64.4	70.0	69.7	69.7	71.8
Beauregard	60.7	60.7	63.5	70.8	70.3	81.0
Bienville	58.1	61.5	57.2	64.5	69.0	61.9
Bossier	77.2	79.5	77.9	76.3	80.8	81.4
Caddo	70.4	71.0	69.5	68.0	72.9	72.0
Calcasieu	78.3	80.0	79.6	81.6	81.6	84.1
Caldwell	75.4	80.7	79.4	79.0	78.8	79.7
Cameron	81.5	88.6	84.3	84.0	83.3	84.0
Catahoula	71.0	74.3	65.7	73.3	68.3	68.1
Claiborne	58.1	67.4	63.4	61.0	58.0	61.7
Concordia	65.9	72.7	73.7	65.7	64.1	69.7
DeSoto	69.2	68.8	66.8	68.1	76.0	70.2
East Baton Rouge	74.5	78.3	75.7	75.4	75.3	74.7
East Carroll	56.1	55.9	69.6	60.3	58.3	52.4
East Feliciana	65.8	67.7	60.1	70.8	72.6	76.7
Evangeline	66.2	62.7	69.7	69.0	66.1	69.4
Franklin	71.7	74.6	65.4	70.3	66.5	71.9
Grant	72.4	77.0	79.8	79.5	80.0	83.9
Iberia	66.5	66.9	61.2	61.1	57.5	62.6
Iberville	73.0	75.4	74.4	78.1	73.2	72.9
Jackson	47.9	57.8	59.1	57.8	58.3	65.6
Jefferson	79.4	81.6	61.1	83.6	82.2	81.7
Jefferson Davis	58.6	62.6	83.3	62.6	60.1	61.5
Lafayette	79.0	72.5	74.1	80.3	85.1	87.8
Lafourche	78.0	83.4	79.8	78.2	84.5	83.0
LaSalle	68.7	65.7	72.9	71.1	80.1	75.8
Lincoln	36.7	48.6	49.9	49.2	48.3	54.3
Livingston	79.4	79.7	83.9	85.2	84.5	87.5
Madison	57.1	56.8	64.4	55.5	59.4	67.5
Morehouse	55.6	50.0	50.6	49.8	49.2	53.8
Natchitoches	60.7	73.7	72.0	68.9	75.5	69.8
Orleans	66.7	65.8	71.4	74.7	76.1	76.6
Ouachita	74.2	78.3	78.0	77.1	79.8	78.1
Plaquemines	71.7	74.0	79.0	74.8	77.9	82.4
Pointe Coupee	69.1	76.5	76.5	75.9	75.5	76.8
Rapides	68.0	70.3	74.7	74.5	75.5	75.8
Red River	69.0	74.5	58.0	64.7	71.3	66.9
Richland	63.9	68.5	75.7	72.8	78.8	76.8
Sabine	64.4	72.9	69.8	73.1	76.8	76.3
St. Bernard	85.5	86.7	88.5	89.9	88.4	85.0

Percent of Mothers Receiving Adequate* Prenatal Care by Parish Louisiana, 1994-1999						
Parish	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
St. Charles	80.7	80.0	84.9	82.6	83.6	76.1
St. Helena	73.8	68.4	71.6	86.9	88.6	89.4
St. James	65.2	65.5	68.2	63.3	68.9	68.9
St. John	64.7	62.9	72.1	65.1	64.6	68.7
St. Landry	57.4	62.0	66.1	63.6	66.0	67.6
St. Martin	70.6	70.2	70.8	73.2	77.6	79.1
St. Mary	77.3	76.9	79.0	75.7	79.0	78.2
St. Tammany	85.8	87.3	86.0	85.8	85.7	84.2
Tangipahoa	72.8	78.8	79.8	87.5	90.9	91.8
Tensas	72.2	67.6	60.0	60.7	50.5	63.5
Terrebonne	71.0	75.9	76.1	73.4	79.8	78.5
Union	59.7	66.1	63.1	66.7	66.2	65.5
Vermilion	76.7	77.1	81.0	84.0	83.7	85.1
Vernon	75.7	76.8	76.9	77.7	77.1	81.3
Washington	62.0	65.6	78.4	74.1	76.3	77.4
Webster	69.7	72.6	76.9	68.9	69.2	72.4
West Baton Rouge	71.0	79.3	74.9	78.6	82.6	74.8
West Carroll	64.9	64.4	67.9	58.6	57.9	58.6
West Feliciana	65.1	75.8	63.3	71.3	84.8	78.6
Winn	49.1	51.4	64.0	57.4	63.6	73.7

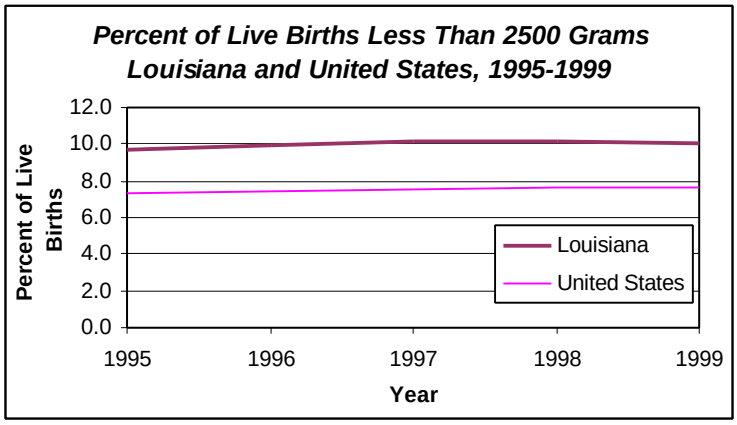
*According to modified Kessner index

Source: Louisiana State Center for Health Statistics

Low Birthweight

A low birthweight infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Low birthweight is a major cause of infant mortality, with more than three-quarters of infant deaths caused by babies being born too small or too early.[4] Low birthweight contributes significantly to later childhood handicap as well. Low birthweight infants are more likely to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight can follow infants throughout life, as they are more likely to have mild learning disorders, attention disorders, and developmental impairments.[5] A higher proportion of low birthweight infants also go on to be enrolled in special education classes than their normal birthweight counterparts.[6]

In 1999, 6,714 of the infants born to Louisiana residents weighed less than 2500 grams (5lbs, 8oz). This represents 10.0% of the live births that year, as compared with 7.6% of the babies born in the United States who were low birthweight. Both Louisiana and the United States have seen an increase in the percentage of infants with low birthweight in recent years.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1888 data)

In the following table, percentages are furnished to provide an idea of Louisiana's standing among the neighboring states in terms of low birthweight infants. (As previously noted, preliminary NCHS 1999 percentages are used for cross-state comparisons.) In 1999, Louisiana had the third highest percentage of low birthweight babies in the nation, outranked by only Mississippi and Washington DC.

[4] Paneth NS. (1995) "The Problem of Low Birth Weight." In *The Future of Children, Low Birth Weight*(19-34).

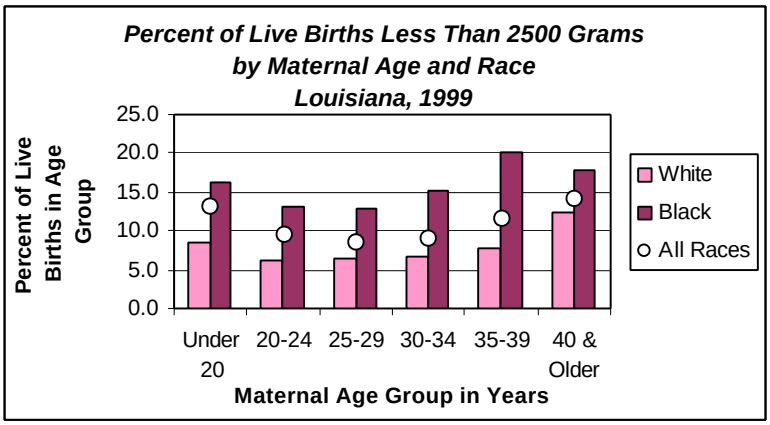
[5] Institute of Medicine. (1985). "The Significance of Low Birthweight." In *Preventing Low Birthweight* (21-45). Washington, DC: National Academy Press.

[6] Hack M, Klein NK, Taylor HG. "Long-Term Developmental Outcomes of Low Birth Weight Infants." *The Future of Children, Low Birth Weight* 1995;5:19-34.

Percent of Live Births Less Than 2500 Grams Louisiana, Neighboring States, and United States, 1999		
State	**Percent of Live Births**	**National Ranking**
Alabama	9.3	4
Arkansas	8.6	10
Louisiana	10.0	2
Mississippi	10.3	1
Texas	7.3	30
United States	7.6	-

Source: National Center for Health Statistics (preliminary 1999 data)

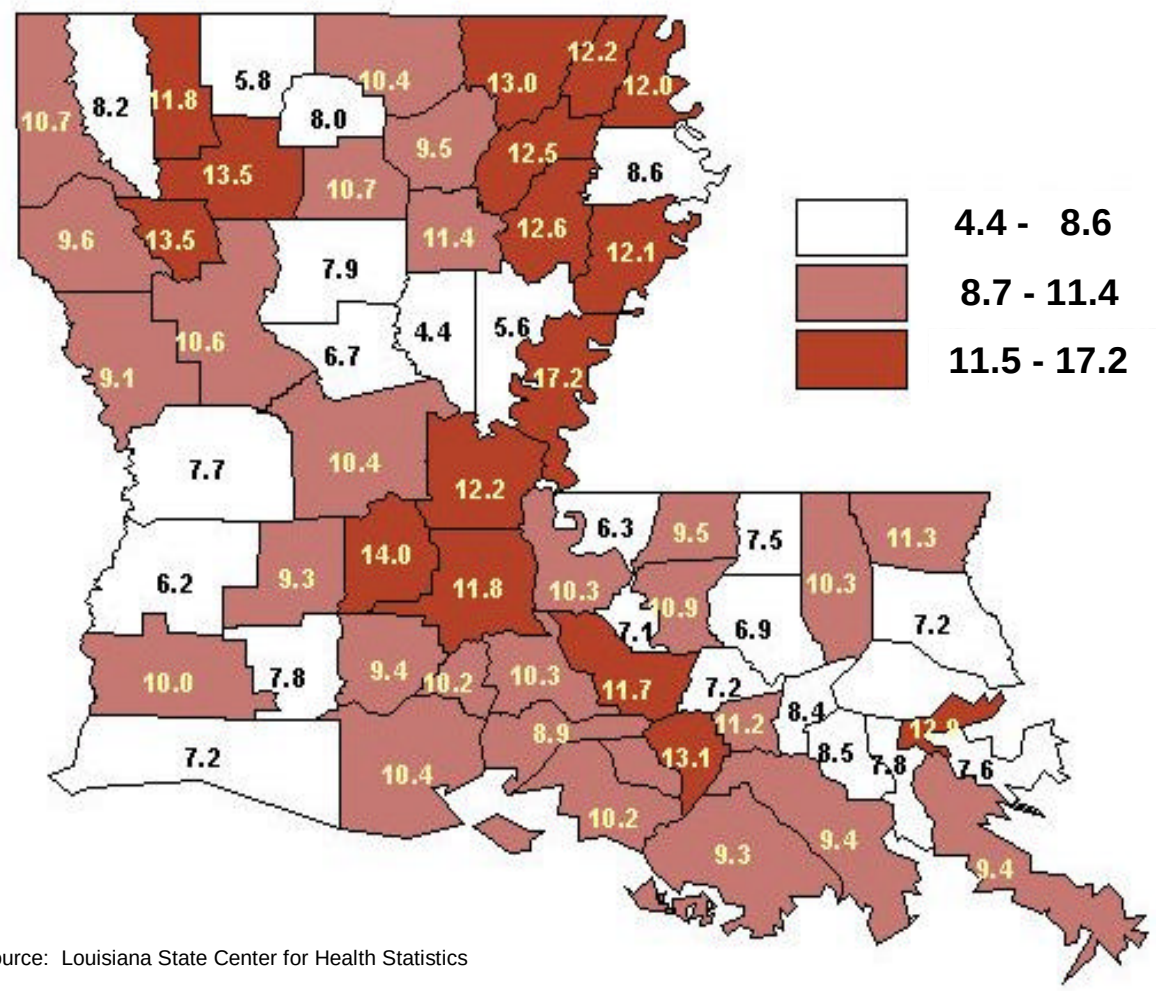
Blacks gave birth to infants of low birthweight more than twice as frequently as white women did, at 14.5% compared with 6.9% of live births. This discrepancy held true for all age groups. Examination of births by age groups found mothers over age 40 had the highest percentage of low birthweight babies (14.2% of live births), followed by mothers under age 20 (13.1%).



Source: Louisiana State Center for Health Statistics

In 1999 Concordia parish had the highest percentage of low birthweight babies at 17.2% of live births, and LaSalle parish had the lowest at 4.4% of live births. The map on the following page shows the percent of live births that are low birthweight babies in each parish.

Percent Low Birthweight (<5lbs. 8oz.) Louisiana, 1999



Source: Louisiana State Center for Health Statistics

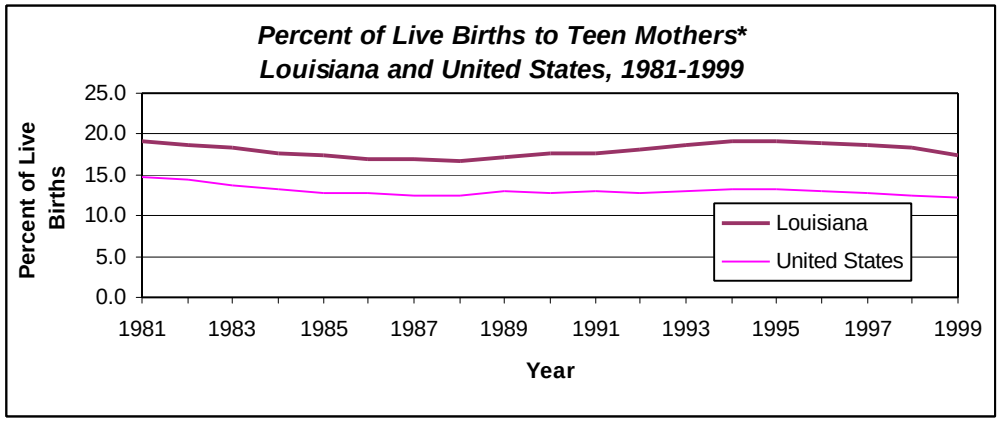
Infants weighing less than 1500 grams (3lbs, 5oz) at birth are considered to be very low birthweight and are at much greater risk of mortality and long-term disability. The risk of early death for very low birthweight infants is about 65 times that of infants who weigh at least 1500 grams.[7] In 1999, 2.1% of infants born to Louisiana residents weighed less than 1500 grams, as compared with 1.5% of infants born to United States residents. As with infants weighing less than 2500 grams, there were demographic differences in the mothers giving birth to very low birthweight infants. Black mothers gave birth to very low birthweight infants three times as frequently as white mothers did, at 3.4% compared with 1.2% of live births. Infants born to the youngest and the oldest mothers were more frequently very low birthweight. Of all infants born to mothers under the age of 20 years, 2.4% were very low birthweight; 2.6% of infants born to mothers over the age of 40 years were very low birthweight.

[7] Ventura SJ, Martin JA, Curtin SC, Mathews TJ. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report*, vol 45 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1997.

Teen Births

Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. Teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants.[8] Their infants are more likely to be hospitalized and go on to have childhood health problems. National statistics report that most births to teens (78.9%) occur outside marriage[9] and 25% of teenage mothers go on to have children within the next two years.[10] These factors, combined with the fact that teenage mothers are less likely to finish high school, contribute to the high proportion of women living in poverty who first gave birth during adolescence. In 1993, of the 3.8 million mothers aged 15-44 who received welfare or Aid to Families with Dependent Children (AFDC), 55% first became mothers as teenagers.[11] In fiscal year 1995, Louisiana spent over $875 million on programs that support families begun by teens (in the form of AFDC, Food Stamps, WIC, and Medicaid). In contrast, Louisiana spent only $5.7 million on programs designed to prevent teenage pregnancy.[12]

In 1999, there were 11,758 live births to Louisiana residents under the age of 20. This number comprised 17.5% of the total live births to Louisiana residents in 1999, as compared with 12.2% at the national level.



*Teen mothers are less than 20 years old at the time of birth
Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1999 data)

[8] Lewis CT, Mathews TJ, Heuser RL. *Prenatal Care in the United States, 1980-94.* National Center for Health Statistics. Vital Health Stat 21(54). 1996.

[9] Ventura SJ, Curtin SC, Martin JA, Mathews TJ. "Variations in Teenage Birth Rates, 1991-98." *National Vital Statistics Reports*, vol 48 no 6. Hyattsville, Maryland: National Center for Health Statistics. 2000.

[10] The Alan Guttmacher Institute. *Sex and America's Teenagers.* 1994.

[11] The Alan Guttmacher Institute. *Issues in Brief.* February 1995.

[12] Kreutzer, Tracy A. *Expenditures and Investments: Adolescent Pregnancy in the South.* Volume II. Southern Regional Project on Infant Mortality. Washington, DC. 1997.

In the table below, percentages are furnished to provide an idea of Louisiana's standing among the neighboring states in terms of births to teenagers. (As noted previously, preliminary NCHS 1999 numbers are used to facilitate cross-state comparisons.) Louisiana consistently has ranked near the top of the states in terms of percentage of live births to teens, and 1999 was no exception. Louisiana had the fourth highest percentage of live births to teens in the nation, one of four southern states ranked among the top five in the country.

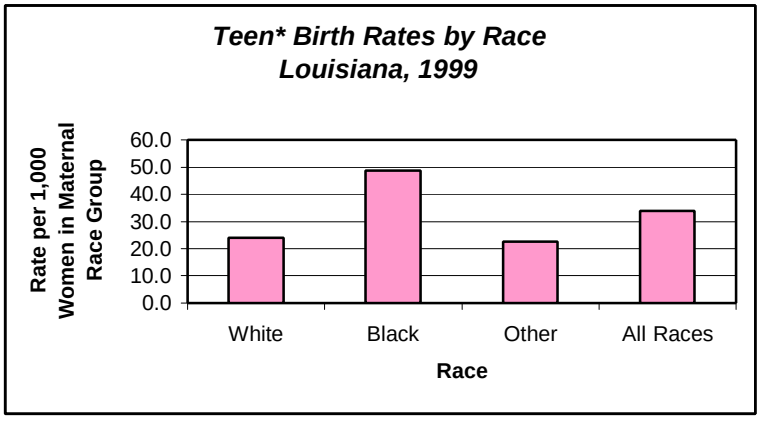
Percent of Live Births to Teens*
Louisiana, Neighboring States, and United States, 1999

State	Percent of Live Births	National Ranking
Alabama	16.2	5
Arkansas	17.8	3
Louisiana	17.6	4
Mississippi	19.7	1
Texas	15.9	7
United States	12.2	-

*Teen mothers are less than 20 years old at the time of birth

Source: National Center for Health Statistics (preliminary 1999 data)

To make comparisons of births among teens in different race groups meaningful, teen birth rates have been calculated by relating the number of teen births in each race group to the total number of teen women in the same race group. This method of calculating teen birth rates controls for differences in the proportion of women in the race groups, and is the method used by the National Center for Health Statistics (NCHS).[13] In Louisiana, the birth rate for black teenagers in 1999 was more than twice that of white teenagers, at 48.9 compared with 23.9 births per 1,000 women in the respective age and race groups.

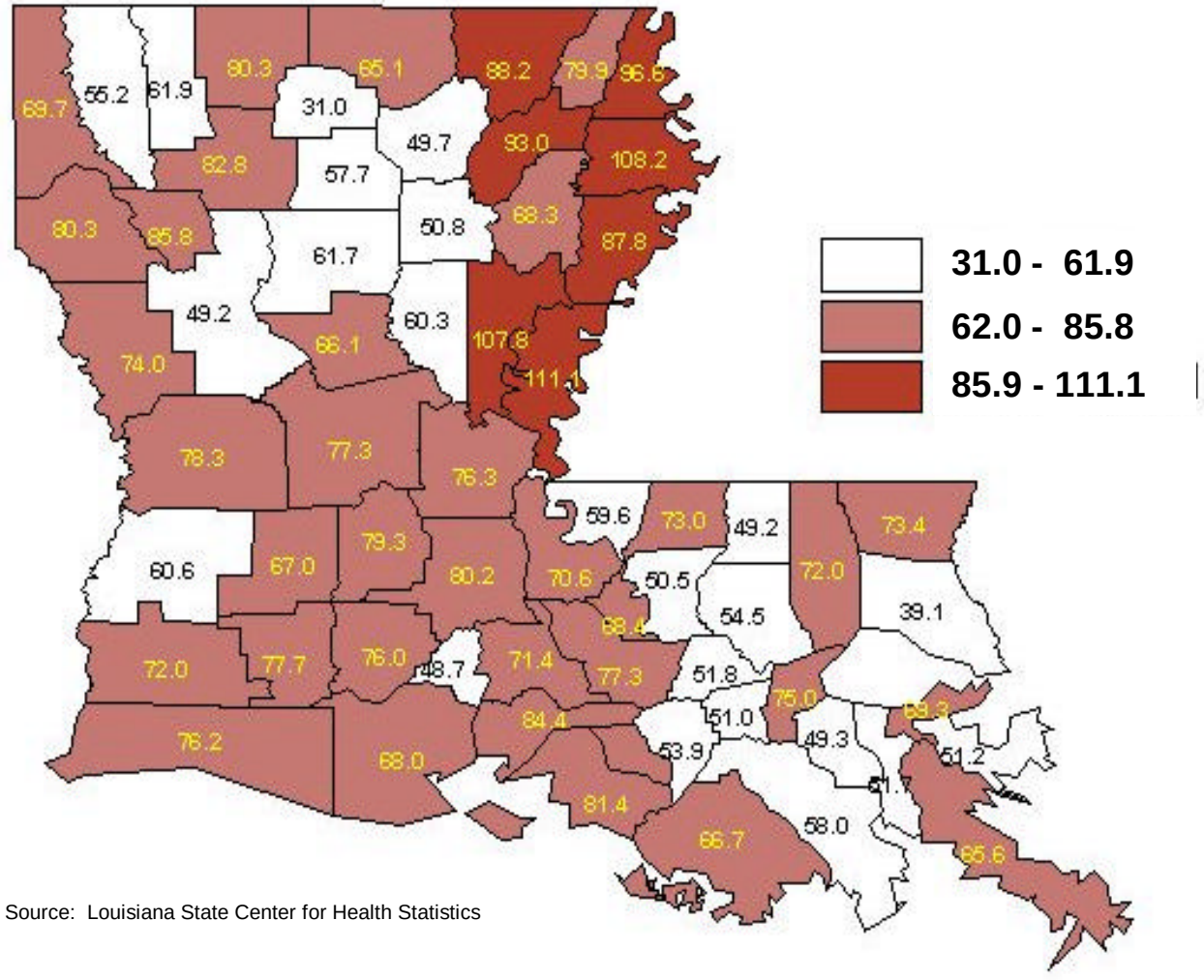


*Teen mothers are less than 20 years old at the time of birth
Source: Louisiana State Center for Health Statistics

There is considerable variation in teenage birth rates by parish. In 1999 Concordia parish had the highest rate at 111.1 births per 1,000 women aged 15-19. This is almost three times the rate of Lincoln, the parish with the lowest rate at 31.0 births per 1,000 women aged 15-19. The following map shows teenage birth rates in Louisiana by parish.

[13] Clarke SC and Ventura SL. *Birth and Fertility Rate for States: United States, 1990* National Center for Health Statistics. Vital Health Stat 21(52). 1994.

Teen Birth Rate
Per 1,000 Women Ages 15-19
Louisiana, 1999



Source: Louisiana State Center for Health Statistics

Percent of Total Live Births to Teenagers 15-19 Years of Age Louisiana, 1995-1999															
	15-17 Years					18-19 Years					15-19 Years*				
	95	96	97	98	99	95	96	97	98	99	95	96	97	98	99
Louisiana	7	7	7	6	6	11	11	11	11	11	19	18	18	18	17
Acadia	8	7	9	7	6	12	13	13	13	14	21	20	22	20	20
Allen	8	6	5	4	5	13	11	15	14	11	21	17	21	18	17
Ascension	5	6	5	5	4	10	9	9	9	8	15	15	13	14	12
Assumption	6	6	9	7	7	12	14	14	14	11	18	20	23	20	18
Avoyelles	7	7	10	8	6	13	11	13	11	13	20	19	22	18	19
Beauregard	4	5	9	5	7	13	12	12	14	11	17	18	20	19	18
Bienville	5	10	10	12	9	14	10	14	12	20	19	21	24	23	29
Bossier	5	6	6	5	5	10	10	11	12	9	16	16	17	17	14
Caddo	8	8	7	6	7	12	11	12	13	12	19	18	19	20	19
Calcasieu	7	6	7	6	6	12	13	12	12	12	19	19	19	18	18
Caldwell	11	10	6	11	4	11	12	16	14	14	22	22	20	25	18
Cameron	5	9	12	11	4	9	21	10	15	16	14	30	22	26	20
Catahoula	11	6	8	9	9	14	20	18	18	22	25	26	26	27	31
Claiborne	10	13	9	10	12	8	9	11	10	13	19	22	20	20	24
Concordia	14	10	11	14	11	18	20	16	12	21	32	30	26	26	32
DeSoto	9	8	7	7	9	14	13	14	12	12	24	21	20	18	20
E. Baton Rouge	6	6	6	6	5	9	10	9	10	10	14	16	14	15	15
E. Carroll	14	7	17	12	14	13	8	6	17	14	27	16	22	29	28
E. Feliciana	5	9	8	5	7	11	24	16	17	11	16	33	24	22	19
Evangeline	8	10	11	7	6	14	14	12	13	14	23	24	22	20	21
Franklin	9	8	7	7	6	14	16	16	13	14	23	24	22	20	20
Grant	6	9	5	8	4	16	14	15	13	16	22	23	20	20	19
Iberia	9	10	8	9	8	15	11	12	14	13	24	21	20	23	21
Iberville	7	8	7	6	7	11	13	11	13	13	18	21	16	19	21
Jackson	7	8	7	5	6	14	12	9	12	12	22	20	15	17	18
Jefferson	5	7	6	5	5	10	12	9	9	9	15	20	15	14	14
Jefferson Davis	8	6	9	7	6	13	9	12	13	14	21	15	21	20	20
Lafayette	5	5	5	5	4	10	9	9	9	9	15	15	14	14	13
Lafourche	8	6	7	6	7	10	11	11	12	11	18	17	17	18	18
LaSalle	9	7	8	8	5	10	12	10	12	13	19	19	18	20	17
Lincoln	8	7	7	8	6	9	7	13	10	10	17	14	19	18	16
Livingston	6	5	6	6	5	11	11	10	9	10	18	16	17	15	15
Madison	14	10	11	13	10	13	17	13	13	18	27	27	21	27	29
Morehouse	15	10	13	10	9	15	13	15	14	17	30	24	27	26	26
Natchitoches	9	8	9	6	5	15	14	12	13	14	24	21	21	19	19
Orleans	10	9	8	8	7	12	12	12	12	12	22	20	20	21	19
Ouachita	7	8	7	6	5	12	13	11	12	10	19	21	17	18	16
Plaquemines	6	10	8	5	5	11	12	12	11	12	17	21	19	16	16
Pointe Coupee	7	10	8	8	7	12	10	14	13	11	19	19	21	21	18
Rapides	7	7	9	8	7	14	14	12	14	13	21	21	21	22	20
Red River	6	9	11	7	10	13	15	9	13	13	19	24	18	20	23
Richland	14	10	12	11	11	15	14	12	14	13	29	23	23	24	24
Sabine	8	9	6	6	8	16	13	13	16	13	24	22	19	23	20
St. Bernard	6	6	4	5	5	10	11	10	8	11	15	17	14	14	15
St. Charles	7	4	6	5	4	6	9	10	9	9	13	13	15	14	13
St. Helena	8	10	7	10	4	15	17	14	6	10	23	27	20	16	14
St. James	8	7	5	6	6	9	8	9	12	8	18	15	14	18	14
St. John	6	6	7	6	7	11	12	12	12	11	17	18	18	19	18
St. Landry	7	8	9	8	7	12	13	12	14	13	19	22	21	22	21
St. Martin	6	8	8	8	7	12	12	11	13	12	18	20	19	20	19
St. Mary	9	9	8	7	7	14	14	14	13	14	23	23	22	20	21
St. Tammany	5	5	5	3	4	8	6	8	8	7	13	11	12	11	11
Tangipahoa	8	9	10	7	7	14	14	14	13	14	22	23	24	21	21
Tensas	11	12	19	5	7	19	17	14	23	16	31	30	32	29	22
Terrebonne	7	8	9	8	6	11	11	13	13	13	18	20	21	21	18
Union	8	8	10	6	4	13	15	9	10	13	22	22	19	16	17
Vermilion	7	5	6	8	6	12	12	11	13	10	19	18	16	20	16
Vernon	4	4	4	4	4	12	12	13	10	10	16	16	17	14	14
Washington	11	7	9	9	6	19	11	17	13	13	30	18	25	22	19
Webster	8	6	10	6	5	14	11	14	14	13	22	17	23	20	19
W. Baton Rouge	4	10	8	4	7	12	15	12	11	11	16	25	19	15	18
W. Carroll	7	9	5	11	8	13	11	15	11	16	21	20	20	23	24
W. Feliciana	10	7	8	6	7	5	17	9	11	7	15	23	17	18	14
Winn	12	7	10	9	5	13	13	16	13	13	25	19	26	21	18

*May not equal sum of "15-17 Years" and "18-19 Years" due to rounding
Source: Louisiana State Center for Health

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Louisiana	67,034	77.5	10.0	17.5
White	38,350	85.4	6.9	12.5
Black	27,234	66.4	14.5	25.0
Other	1,450	77.2	7.8	10.5
Acadia	940	71.6	9.4	20.4
White	725	78.9	8.6	16.3
Black	213	47.1	12.2	34.7
Other	<5	50.0	-	0.0
Allen	364	77.3	9.3	17.0
White	285	81.6	6.0	17.5
Black	71	65.7	19.7	14.1
Other	8	25.0	37.5	25.0
Ascension	1,314	82.8	7.2	12.7
White	987	89.2	5.3	9.3
Black	319	63.3	13.2	23.5
Other	8	62.5	-	0.0
Assumption	297	83.1	13.1	18.2
White	171	91.6	8.8	13.5
Black	123	70.8	19.5	25.2
Other	<5	100.0	-	0.0
Avoyelles	617	71.8	12.2	19.8
White	393	80.2	8.7	16.3
Black	221	56.7	18.6	25.8
Other	<5	66.7	-	33.3
Beauregard	433	81.0	6.2	18.5
White	371	85.7	5.9	17.5
Black	58	53.5	6.9	25.9
Other	<5	50.0	25.0	0.0
Bienville	171	61.9	13.5	30.4
White	97	76.6	15.5	15.5
Black	74	43.2	10.8	50.0
Other	-	-	-	-
Bossier	1,485	81.4	8.2	14.3
White	1058	86.8	6.0	10.7
Black	400	67.2	13.8	24.5
Other	27	81.5	11.1	7.4
Caddo	3,653	72.0	10.7	19.1
White	1,631	85.5	5.8	12.3
Black	1,973	60.4	15.0	25.2
Other	49	91.8	2.0	2.0
Calcasieu	2,858	84.1	10.0	18.6
White	2,005	89.1	7.6	15.7
Black	819	72.2	16.2	26.3
Other	34	82.4	2.9	8.8

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Caldwell	123	79.7	11.4	17.9
White	108	81.5	9.3	17.6
Black	15	66.7	26.7	20.0
Other	-	-	-	-
Cameron	125	84.0	7.2	20.0
White	119	84.9	6.7	20.2
Black	<5	100.0	33.3	33.3
Other	<5	33.3	-	0.0
Catahoula	142	68.1	5.6	31.0
White	82	81.7	3.7	24.4
Black	60	49.2	8.3	40.0
Other	-	-	-	-
Claiborne	190	61.7	5.8	25.3
White	79	80.8	1.3	20.3
Black	111	48.2	9.0	28.8
Other	-	-	-	-
Concordia	302	69.7	17.2	31.8
White	149	80.6	16.8	27.5
Black	150	59.9	18.0	36.0
Other	<5	33.3	-	33.3
DeSoto	396	70.2	9.6	21.5
White	207	78.8	6.8	15.9
Black	189	60.9	12.7	27.5
Other	-	-	-	-
E. Baton Rouge	6,206	74.7	10.9	15.2
White	2,874	88.1	7.0	6.1
Black	3203	62.7	14.5	23.6
Other	129	72.9	6.2	8.5
East Carroll	150	52.4	12.0	29.3
White	30	80.0	-	16.7
Black	120	45.4	15.0	32.5
Other	-	-	-	-
E. Feliciana	316	76.7	9.5	19.0
White	165	87.2	7.3	15.2
Black	151	65.1	11.9	23.2
Other	-	-	-	-
Evangeline	529	69.4	14.0	21.4
White	329	77.2	8.8	16.1
Black	198	56.6	22.7	30.3
Other	<5	50.0	-	0.0
Franklin	348	71.9	12.6	21.0
White	203	81.9	10.8	13.3
Black	143	57.9	15.4	32.2
Other	<5	50.0	-	0.0

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Grant	283	83.9	6.7	19.8
White	250	85.9	5.2	20.0
Black	31	65.5	19.4	19.4
Other	<5	100.0	-	0.0
Iberia	1,212	62.6	8.9	21.3
White	732	70.4	6.1	15.3
Black	449	50.8	13.8	31.4
Other	31	48.4	3.2	16.1
Iberville	460	72.9	11.7	20.7
White	217	82.8	7.4	14.3
Black	241	64.1	15.8	26.6
Other	<5	50.0	-	0.0
Jackson	196	65.6	10.7	17.9
White	135	76.5	11.9	15.6
Black	60	40.7	8.3	21.7
Other	<5	100.0	-	100.0
Jefferson	6,311	81.7	8.6	14.2
White	3,973	86.9	6.6	9.3
Black	1,979	71.1	12.8	24.8
Other	359	82.0	7.5	8.9
Jefferson Davis	514	61.5	7.8	20.2
White	398	63.2	6.5	17.8
Black	113	54.5	12.4	29.2
Other	<5	100.0	-	0.0
Lafayette	2,889	87.8	10.2	13.2
White	1,934	93.0	7.1	9.3
Black	908	77.2	16.6	21.8
Other	47	76.6	14.9	10.6
Lafourche	1,237	83.0	9.4	18.0
White	940	84.7	7.7	14.4
Black	252	77.4	16.3	30.2
Other	45	77.3	6.7	26.7
LaSalle	183	75.8	4.4	17.5
White	162	80.9	2.5	16.7
Black	20	31.6	20.0	25.0
Other	<5	100.0	-	0.0
Lincoln	549	54.3	8.0	16.9
White	260	74.1	4.6	9.6
Black	281	35.6	11.4	24.2
Other	8	62.5	-	0.0
Livingston	1,442	87.5	6.9	14.8
White	1,356	88.5	6.6	14.2
Black	79	69.2	13.9	26.6
Other	7	85.7	-	0.0

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Madison	244	67.5	8.6	29.1
White	69	94.1	2.9	21.7
Black	175	57.0	10.9	32.0
Other	-	-	-	-
Morehouse	471	53.8	13.0	26.8
White	212	60.5	8.5	19.8
Black	256	48.0	16.4	32.8
Other	<5	66.7	33.3	0.0
Natchitoches	576	69.8	10.6	19.1
White	276	82.0	8.7	15.2
Black	297	58.2	12.1	22.9
Other	<5	100.0	33.3	0.0
Orleans	7,663	76.6	12.9	19.7
White	1,409	89.2	7.0	4.3
Black	6,062	73.6	14.5	23.8
Other	192	80.5	5.7	2.1
Ouachita	2,139	78.1	9.5	16.7
White	1,128	86.9	5.6	11.0
Black	994	68.1	14.0	23.3
Other	17	70.6	5.9	5.9
Plaquemines	416	82.4	9.4	16.1
White	292	87.2	8.9	15.1
Black	111	70.6	10.8	19.8
Other	13	76.9	7.7	7.7
Pointe Coupee	370	76.8	10.3	17.8
White	208	90.7	6.3	12.0
Black	160	58.5	15.6	25.6
Other	<5	100.0	-	0.0
Rapides	1,990	75.8	10.4	19.8
White	1,162	84.7	6.8	16.4
Black	799	63.2	15.5	24.4
Other	29	67.9	10.3	27.6
Red River	141	66.9	13.5	22.7
White	64	81.3	10.9	17.2
Black	76	54.1	15.8	27.6
Other	<5	100.0	-	0.0
Richland	360	76.8	12.5	25.0
White	188	83.3	5.3	19.1
Black	172	69.6	20.3	31.4
Other	-	-	-	-
Sabine	320	76.3	9.1	20.3
White	231	80.7	6.9	21.2
Black	72	59.7	16.7	15.3
Other	17	88.2	5.9	29.4

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
St. Bernard	838	85.0	7.6	15.0
White	728	86.2	6.3	14.6
Black	85	75.3	18.8	22.4
Other	25	84.0	8.0	4.0
St. Charles	682	76.1	8.5	12.9
White	455	83.3	7.3	8.4
Black	219	61.6	11.0	22.8
Other	8	62.5	12.5	0.0
St. Helena	134	89.4	7.5	14.2
White	56	92.7	7.1	8.9
Black	78	87.0	7.7	17.9
Other	-	-	-	-
St. James	330	68.9	11.2	14.5
White	111	85.6	3.6	8.1
Black	217	60.9	14.7	18.0
Other	<5	-	50.0	0.0
St. John	705	68.7	8.4	18.6
White	330	78.4	4.5	13.3
Black	365	59.9	11.8	23.6
Other	10	70.0	10.0	10.0
St. Landry	1,394	67.6	11.8	21.4
White	693	78.4	8.9	17.7
Black	697	56.9	14.6	25.1
Other	<5	50.0	25.0	25.0
St. Martin	756	79.1	10.3	19.3
White	461	87.8	7.8	14.5
Black	280	64.9	15.0	26.8
Other	15	80.0	-	26.7
St. Mary	879	78.2	10.2	21.7
White	527	83.9	8.3	17.3
Black	309	69.0	13.3	29.1
Other	43	74.4	11.6	23.3
St. Tammany	2,694	84.2	7.2	10.6
White	2,269	87.5	6.2	8.3
Black	379	65.2	12.7	24.3
Other	46	78.3	10.9	10.9
Tangipahoa	1,639	91.8	10.3	21.2
White	975	92.7	6.6	15.7
Black	652	90.5	15.8	29.6
Other	12	83.3	16.7	8.3
Tensas	116	63.5	12.1	22.4
White	35	91.4	5.7	17.1
Black	81	51.3	14.8	24.7
Other	-	-	-	-

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1999				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Terrebonne	1,620	78.5	9.3	18.8
White	1,126	80.6	7.5	16.4
Black	352	76.2	14.5	25.6
Other	142	67.6	10.6	21.1
Union	336	65.5	10.4	18.2
White	195	79.8	5.6	15.9
Black	136	43.8	16.2	22.1
Other	5	75.0	40.0	0.0
Vermilion	835	85.1	10.4	16.4
White	628	89.5	8.0	14.5
Black	179	70.9	20.7	24.6
Other	28	78.6	-	7.1
Vernon	1042	81.3	7.7	14.2
White	795	81.9	7.4	14.8
Black	201	76.0	9.5	13.9
Other	46	93.5	4.3	4.3
Washington	691	77.4	11.3	19.2
White	423	85.1	10.4	15.1
Black	266	65.0	12.8	25.9
Other	<5	100.0	-	0.0
Webster	559	72.4	11.8	19.5
White	338	84.0	6.8	18.6
Black	219	54.0	18.7	21.0
Other	<5	100.0	100.0	0.0
W. Baton Rouge	310	74.8	7.1	18.1
White	184	84.4	4.9	12.0
Black	126	61.1	10.3	27.0
Other	-	-	-	-
West Carroll	164	58.6	12.2	23.8
White	129	60.6	10.1	22.5
Black	35	51.4	20.0	28.6
Other	-	-	-	-
W. Feliciana	158	78.6	6.3	14.6
White	73	91.7	2.7	5.5
Black	85	67.1	9.4	22.4
Other	-	-	-	-
Winn	227	73.7	7.9	18.5
White	155	82.4	4.5	14.8
Black	72	54.9	15.3	26.4
Other	-	-	-	-

*According to modified Kessner index

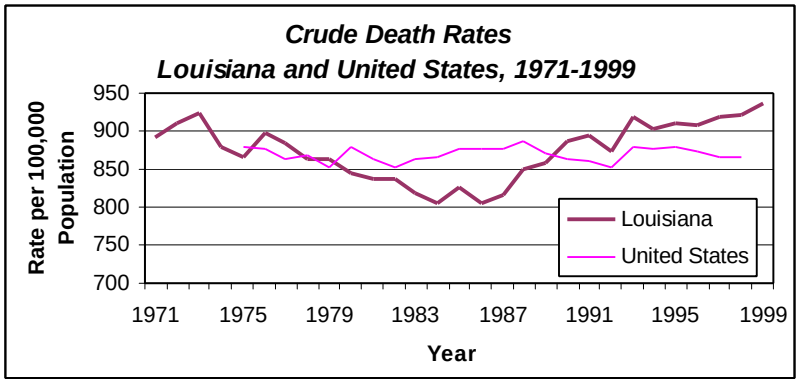
Source: Louisiana State Center for Health Statistics

C. DEATHS

Death Counts and Crude Mortality Rates

There were 40,976 deaths among Louisiana residents in 1999, representing a slight increase from 40,209 deaths in 1998. Of total deaths, there were virtually equal numbers of males (50.00%) and females (49.99%). In terms of race, 1999 deaths included 28,168 white, 12,637 black, and 171 other race deaths. Of total resident deaths, 19.0%, 46.8%, and 23.2% occurred among those aged 45-64 years, 65-84 years, and 85 years and older, respectively.

Crude death rates are useful for examining the overall mortality in an area or population group, since they utilize total population and do not account for any population attributes. In Louisiana, the crude death rate increased from 920.3 per 100,000 population in 1998 to 937.2 in 1999. In comparison, the United States rate was 864.7 in both 1997 and 1998 (the most current year for which U.S. data are available). In Louisiana, the crude death rate has been steadily increasing since the mid-1980s. In 1990 the crude death rate in Louisiana leapt beyond the United States rate and has maintained a widening margin ever since.



Sources: Louisiana State Center for Health Statistics (final 1999 data)
National Center for Health Statistics (final 1998 data)

Crude (or unadjusted) death rates give us an estimate of the overall mortality for a population, because they measure deaths in the population as a whole. Crude rates, however, ignore idiosyncrasies in the composition of a population, such as the unusually large number of elderly people who live in parts of Florida. Population idiosyncrasies like this can cause an increase in the crude death rate because of the large number of people in the population who are at high risk of dying because of advancing age.

Adjusted rates (also called standardized rates) are derived from statistical procedures that adjust for differences in population composition, such as age, race, or sex, which can increase or decrease the likelihood of death in one or more of the populations being considered. Age is the most common factor for which adjustment is done, since it is the most significant characteristic related to death and disease.

Because age-adjusted death rates control for the variations in age structures of populations, they make comparisons between mortality rates meaningful. However, the age-adjusted mortality measure is not a true estimation of the death rate, as the crude mortality measure is, and it should not be used in comparisons with crude mortality rates. Differences seen in age-adjusted rates in two different populations may reflect an actual difference in death rates in the

two populations, or may be due to other factors, such as race or sex, which were not taken into account when the adjustments for age were made.

In the table below, crude and age-adjusted mortality rates (adjusted to 1940 United States standard population) are furnished to provide an idea of Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1999 rates are available and are reported in this document, National Center for Health Statistics final 1998 data for all states have been used in this table to permit comparison with surrounding states.) While all neighboring states' rates are above the national figure, Louisiana's age-adjusted mortality rate lies within the range of the neighboring states' rates.

Mortality Rates
Louisiana, Neighboring States, and United States, 1998

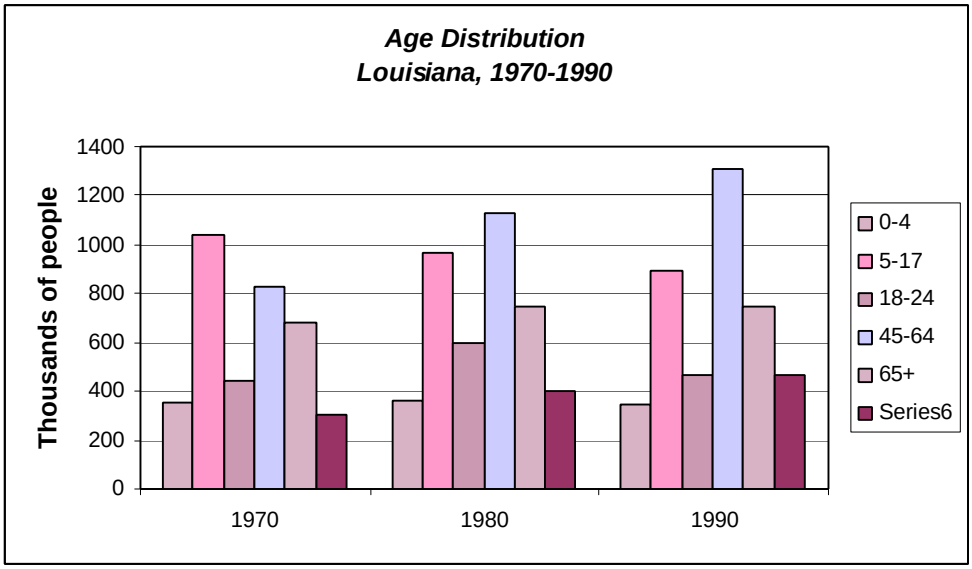
State	Crude Rate*	Age-Adjusted Rate**
Alabama	1,009.4	565.9
Arkansas	1,083.8	551.0
Louisiana	1,013.8	529.5
Mississippi	1,011.8	606.6
Texas	721.7	475.3
United States	864.7	471.7

*Rate per 100,000 1998 population

**Rate per 100,000 1940 U.S. standard population

Source: National Center for Health Statistics (final 1998 data)

Some of the difference between Louisiana's crude death rate and the United States rate was affected by the age distribution of the population. The graph below demonstrates how age distributions of populations change over time and highlights the importance of using age-adjusted rates to make comparisons among populations.



Source: Louisiana State Center for Health Statistics

The increase in the crude death rate seen in Louisiana since the mid-1980's is attributable at least in part to the age distribution of the population given in the previous figure. The large 5-24 year old population in 1970 has become older over time and constituted a large 25-44 year old population in 1990. Simply stated, the population of Louisiana in 1990 was older than the state population was in 1970.

As expected, the greatest proportion of deaths occurred in those of the 65-84 and the 85 and older age groups. Death counts for males exceeded those for females in the younger and middle age groups, and were, therefore, well below female counts in the oldest age group.

Number of Deaths by Age Group and Sex
Louisiana, 1999

Sex	Age Group								
	Under 5	5-14	15-24	25-44	45-64	65-84	85+	Unknown	Total
Male	400	115	555	1,883	4,701	9,754	3,077	7	20,492
Female	339	68	192	952	3,080	9,429	6,421	3	20,484
Total	739	183	747	2,835	7,781	19,183	9,498	10	40,976

Source: Louisiana State Center for Health Statistics (final 1999 data)

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Louisiana	40976	9.4	ALL	618	121	68	115	336	411	944	1891	3140	4641	8220	10963	9498	10
	13918		WM	129	29	20	42	137	151	344	644	1091	1726	3257	4023	2320	5
	14250		WF	98	22	12	18	57	41	137	355	647	1146	2516	4233	4967	1
	6484		BM	198	42	21	32	107	156	293	583	835	1018	1259	1186	752	2
	6153		BF	187	28	15	21	31	60	158	296	547	718	1157	1498	1435	2
	90		OM	2	-	-	-	2	2	9	10	9	22	19	10	5	-
	81		OF	4	-	-	2	2	1	3	3	11	11	12	13	19	-
Acadia	564	9.8	ALL	8	1	1	1	4	3	6	30	40	61	125	151	133	-
	228		WM	3	1	-	-	3	2	4	15	13	30	58	59	40	-
	230		WF	1	-	1	1	-	1	1	8	18	18	43	60	78	-
	54		BM	-	-	-	-	1	-	1	3	4	10	13	17	5	-
	51		BF	4	-	-	-	-	-	-	4	5	3	11	14	10	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allen	220	9.0	ALL	3	-	2	1	2	2	2	9	7	24	41	67	60	-
	83		WM	1	-	-	-	2	1	-	5	5	12	19	26	12	-
	89		WF	2	-	2	-	-	-	1	2	-	5	13	29	35	-
	31		BM	-	-	-	1	-	1	1	2	2	2	8	6	8	-
	16		BF	-	-	-	-	-	-	-	-	-	5	1	6	4	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ascension	495	6.7	ALL	7	4	-	2	8	10	14	30	47	53	90	140	90	-
	201		WM	3	1	-	-	5	5	6	12	18	22	41	63	25	-
	177		WF	1	1	-	-	2	2	1	7	16	18	34	51	44	-
	56		BM	2	2	-	1	1	2	5	8	4	6	9	6	10	-
	59		BF	1	-	-	1	-	1	2	2	9	6	6	20	11	-
	2		OM	-	-	-	-	-	-	-	1	-	1	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assumption	212	9.3	ALL	4	2	-	1	-	4	2	5	20	22	46	56	50	-
	70		WM	1	-	-	-	-	4	2	1	8	9	20	19	6	-
	70		WF	1	-	-	1	-	-	-	2	2	2	15	14	33	-
	35		BM	2	2	-	-	-	-	-	2	5	6	5	9	4	-
	37		BF	-	-	-	-	-	-	-	-	5	5	6	14	7	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Avoyelles	512	12.5	ALL	5	2	2	2	4	5	10	15	30	55	81	170	131	-
	190		WM	-	2	2	1	3	2	8	4	11	24	40	68	25	-
	192		WF	-	-	-	-	1	-	2	4	10	16	19	70	70	-
	64		BM	2	-	-	1	-	1	-	7	3	9	10	18	13	-
	65		BF	3	-	-	-	-	2	-	-	5	6	12	14	23	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Beauregard	308	9.7	ALL	2	1	-	-	1	1	11	12	26	47	71	71	65	-
	146		WM	1	-	-	-	1	1	4	5	11	26	35	38	24	-
	120		WF	1	-	-	-	-	-	6	6	9	15	21	29	33	-
	24		BM	-	-	-	-	-	-	1	1	3	3	9	2	5	-
	18		BF	-	1	-	-	-	-	-	-	3	3	6	2	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bienville	215	13.8	ALL	-	-	-	-	1	1	1	3	9	22	45	62	71	-
	68		WM	-	-	-	-	-	-	1	2	1	4	18	20	22	-
	65		WF	-	-	-	-	1	-	-	-	3	7	8	18	28	-
	47		BM	-	-	-	-	-	1	-	-	3	7	13	12	11	-
	35		BF	-	-	-	-	-	-	-	1	2	4	6	12	10	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	9-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bossier	777	8.2	ALL	9	3	2	2	4	5	15	37	61	90	191	195	162	1
	316		WM	5	-	2	1	-	4	8	10	25	46	87	93	35	-
	307		WF	-	3	-	1	-	-	5	16	19	26	66	73	97	1
	80		BM	3	-	-	-	3	-	1	10	10	11	16	16	10	-
	71		BF	1	-	-	-	1	1	1	1	7	6	20	13	20	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		OF	-	-	-	-	-	-	-	-	-	1	2	-	-	-
Caddo	2530	10.5	ALL	52	8	3	5	20	26	60	84	206	247	484	677	658	-
	726		WM	4	2	1	2	8	7	18	23	51	72	159	229	150	-
	830		WF	8	1	-	-	4	4	6	12	35	53	150	235	322	-
	472		BM	17	5	-	2	7	11	24	31	70	72	90	82	61	-
	501		BF	23	-	2	1	1	4	12	18	49	50	85	131	125	-
	1		OM	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcasieu	1679	9.3	ALL	26	3	3	4	16	6	37	72	114	202	374	449	373	-
	651		WM	6	-	1	2	8	3	19	28	42	86	163	180	113	-
	615		WF	6	1	-	-	5	2	5	17	28	57	118	180	196	-
	212		BM	8	2	1	1	1	1	10	17	27	33	47	39	25	-
	199		BF	6	-	1	1	2	-	3	10	17	26	45	49	39	-
	2		OM	-	-	-	-	-	-	-	-	-	-	1	1	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caldwell	112	10.6	ALL	-	1	-	1	2	2	2	1	7	15	27	23	31	-
	61		WM	-	1	-	-	2	2	2	1	4	8	16	13	12	-
	37		WF	-	-	-	1	-	-	-	-	1	4	7	7	17	-
	9		BM	-	-	-	-	-	-	-	-	1	3	2	1	2	-
	5		BF	-	-	-	-	-	-	-	-	1	-	2	2	-	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cameron	82	9.1	ALL	3	-	-	1	1	-	-	1	5	5	29	22	15	-
	43		WM	3	-	-	1	1	-	-	1	3	1	19	9	5	-
	33		WF	-	-	-	-	-	-	-	-	2	2	9	11	9	-
	2		BM	-	-	-	-	-	-	-	-	-	-	1	1	-	-
	4		BF	-	-	-	-	-	-	-	-	-	2	-	1	1	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Catahoula	119	11.1	ALL	-	-	-	1	-	-	-	7	8	16	19	24	44	-
	44		WM	-	-	-	1	-	-	-	2	3	7	8	7	16	-
	45		WF	-	-	-	-	-	-	-	3	4	6	8	8	16	-
	17		BM	-	-	-	-	-	-	-	2	1	3	2	3	6	-
	13		BF	-	-	-	-	-	-	-	-	-	-	1	6	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claiborne	189	11.0	ALL	-	1	-	-	3	3	3	5	18	16	32	45	63	-
	61		WM	-	1	-	-	2	-	2	2	7	3	12	21	11	-
	51		WF	-	-	-	-	1	1	-	1	1	4	6	14	23	-
	41		BM	-	-	-	-	-	2	1	2	6	6	8	5	11	-
	36		BF	-	-	-	-	-	-	-	-	4	3	6	5	18	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concordia	220	10.6	ALL	3	1	-	-	-	2	5	13	15	33	49	61	37	1
	86		WM	2	-	-	-	-	1	2	6	6	16	24	23	5	1
	55		WF	-	-	-	-	-	-	1	2	3	4	10	17	18	-
	38		BM	-	-	-	-	-	-	2	2	5	6	9	8	6	-
	41		BF	1	1	-	-	-	1	-	3	1	7	6	13	8	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DeSoto	298	11.7	ALL	6	2	-	-	1	1	8	9	17	43	62	78	71	-
	87		WM	-	1	-	-	-	-	1	4	6	11	19	26	19	-
	88		WF	1	1	-	-	-	-	1	1	4	8	20	24	28	-
	63		BM	1	-	-	-	1	1	2	2	6	13	13	13	11	-
	58		BF	4	-	-	-	-	-	4	2	1	9	10	15	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		OF	-	-	-	-	-	-	-	-	-	2	-	-	-	-
E. Baton Rouge	3229	8.1	ALL	60	14	8	8	34	35	104	170	286	348	595	860	706	1
	921		WM	4	1	3	2	12	5	29	30	71	108	188	292	175	1
	1007		WF	7	3	-	1	5	3	11	28	35	62	163	328	361	-
	682		BM	21	3	3	2	15	21	36	79	112	98	123	102	67	-
	604		BF	28	7	2	2	1	6	27	33	65	75	119	136	103	-
	9		OM	-	-	-	-	1	-	-	-	1	5	2	-	-	-
	6		OF	-	-	-	1	-	-	1	-	2	-	-	2	-	-
East Carroll	103	11.7	ALL	2	-	-	-	1	4	2	7	6	8	19	27	27	-
	21		WM	-	-	-	-	-	1	-	1	1	1	9	6	2	-
	20		WF	-	-	-	-	1	-	-	3	-	-	-	9	7	-
	24		BM	1	-	-	-	-	1	2	1	3	2	3	5	6	-
	38		BF	1	-	-	-	-	2	-	2	2	5	7	7	12	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E. Feliciana	221	10.8	ALL	3	-	-	-	2	3	3	11	20	29	50	55	45	-
	70		WM	2	-	-	-	-	-	2	3	8	10	21	20	4	-
	56		WF	1	-	-	-	-	-	-	-	1	7	14	14	19	-
	51		BM	-	-	-	-	2	2	1	4	8	9	9	11	5	-
	43		BF	-	-	-	-	-	1	-	4	3	3	5	10	17	-
	1		OM	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evangeline	381	11.2	ALL	4	1	1	-	2	2	7	18	19	38	80	122	87	-
	140		WM	1	1	1	-	-	1	3	10	9	16	29	49	20	-
	172		WF	-	-	-	-	-	-	2	3	4	12	38	55	58	-
	35		BM	1	-	-	-	1	1	-	2	3	6	6	11	4	-
	33		BF	2	-	-	-	1	-	2	3	3	4	6	7	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	1	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Franklin	282	12.9	ALL	9	-	-	2	1	2	8	13	13	30	50	89	65	-
	86		WM	3	-	-	2	1	-	2	2	2	16	21	25	12	-
	112		WF	3	-	-	-	-	-	1	2	3	9	16	41	37	-
	40		BM	2	-	-	-	-	1	3	6	4	3	6	10	5	-
	44		BF	1	-	-	-	-	1	2	3	4	2	7	13	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grant	201	10.6	ALL	2	-	-	2	1	-	4	7	14	26	47	53	45	-
	77		WM	-	-	-	1	-	-	3	4	8	7	17	23	14	-
	80		WF	2	-	-	1	-	-	1	1	3	10	18	21	23	-
	13		BM	-	-	-	-	-	-	-	1	1	3	5	2	1	-
	30		BF	-	-	-	-	1	-	-	1	2	5	7	7	7	-
	1		OM	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iberia	662	9.1	ALL	13	5	1	1	5	5	10	25	39	73	140	173	172	-
	224		WM	4	1	1	-	3	-	3	10	13	27	57	52	53	-
	246		WF	3	3	-	-	-	1	1	-	7	21	47	72	91	-
	93		BM	3	1	-	-	2	1	4	12	11	16	16	18	9	-
	98		BF	3	-	-	1	-	3	2	3	7	9	20	31	19	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Iberville	298	9.5	ALL	2	1	1	-	-	1	6	15	22	38	66	86	60	-
	95		WM	1	-	-	-	-	-	1	5	6	14	25	33	10	-
	88		WF	-	-	-	-	-	-	-	2	2	6	18	28	32	-
	56		BM	-	1	1	-	-	1	2	6	8	9	13	12	3	-
	59		BF	1	-	-	-	-	-	3	2	6	9	10	13	15	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jackson	198	12.8	ALL	-	-	1	1	2	-	2	6	9	21	33	53	70	-
	72		WM	-	-	-	-	1	-	2	-	3	7	15	20	24	-
	71		WF	-	-	1	-	-	-	-	1	1	7	8	22	31	-
	37		BM	-	-	-	1	-	-	-	3	5	5	9	3	11	-
	18		BF	-	-	-	-	1	-	-	2	-	2	1	8	4	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	4036	8.9	ALL	45	7	3	6	28	31	76	198	322	435	867	1137	881	-
	1676		WM	10	2	1	3	12	13	39	86	150	212	413	491	244	-
	1678		WF	6	1	1	1	2	1	10	45	83	120	325	531	552	-
	342		BM	12	3	1	1	11	10	17	37	53	59	70	47	21	-
	303		BF	17	1	-	1	3	6	4	25	28	40	55	65	58	-
	20		OM	-	-	-	-	-	-	5	4	4	3	4	-	-	-
	17		OF	-	-	-	-	-	1	1	1	4	1	-	3	6	-
Jefferson Davis	352	11.2	ALL	2	2	1	-	3	2	7	15	21	31	79	87	102	-
	131		WM	-	1	1	-	2	-	3	7	11	9	33	34	30	-
	159		WF	1	-	-	-	1	1	3	3	1	13	33	44	59	-
	34		BM	1	1	-	-	-	1	-	4	4	5	8	3	7	-
	28		BF	-	-	-	-	-	-	1	1	5	4	5	6	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lafayette	1426	7.6	ALL	27	3	3	6	12	23	29	83	119	136	309	352	324	-
	512		WM	9	-	2	1	5	8	15	35	46	59	126	133	73	-
	575		WF	8	1	-	3	3	2	3	21	32	33	99	161	209	-
	176		BM	4	1	1	1	1	12	8	20	21	23	46	29	9	-
	159		BF	6	1	-	1	3	1	3	7	20	19	37	28	33	-
	3		OM	-	-	-	-	-	-	-	-	-	2	1	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	1	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Lafourche	689	7.8	ALL	20	1	1	2	10	9	10	36	51	71	141	177	160	-
	312		WM	7	1	-	-	7	5	4	20	27	29	71	89	52	-
	278		WF	5	-	-	2	2	1	3	6	16	24	54	70	95	-
	50		BM	1	-	1	-	-	2	3	6	4	11	10	6	6	-
	42		BF	6	-	-	-	-	1	-	4	3	7	5	10	6	-
	3		OM	1	-	-	-	-	-	-	-	-	-	1	1	-	-
	4		OF	-	-	-	-	1	-	-	-	1	-	-	1	1	-
LaSalle	156	11.1	ALL	-	-	-	-	2	-	1	4	10	17	30	45	47	-
	60		WM	-	-	-	-	-	-	-	1	4	9	19	18	9	-
	79		WF	-	-	-	-	2	-	-	3	2	8	10	23	31	-
	9		BM	-	-	-	-	-	-	-	-	3	-	-	2	4	-
	8		BF	-	-	-	-	-	-	1	-	1	-	1	2	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lincoln	336	8.1	ALL	3	3	-	-	1	3	4	10	20	31	66	95	100	-
	98		WM	1	2	-	-	-	2	1	2	4	9	24	30	23	-
	111		WF	-	-	-	-	-	1	1	-	3	4	21	37	44	-
	67		BM	1	-	-	-	1	-	1	7	8	9	12	9	19	-
	60		BF	1	1	-	-	-	-	1	1	5	9	9	19	14	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livingston	646	7.2	ALL	8	2	-	-	10	9	25	36	62	83	150	163	97	1
	332		WM	3	1	-	-	7	5	15	18	34	54	74	80	40	1
	270		WF	2	-	-	-	3	1	8	12	24	23	69	74	54	-
	20		BM	1	-	-	-	-	1	1	4	3	3	3	3	1	-
	24		BF	2	1	-	-	-	2	1	2	1	3	4	6	2	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Madison	160	12.4	ALL	1	-	-	-	3	-	1	7	19	19	25	46	39	-
	31		WM	-	-	-	-	-	-	-	1	3	5	7	11	4	-
	44		WF	-	-	-	-	1	-	-	1	3	4	4	16	15	-
	39		BM	-	-	-	-	1	-	-	5	6	8	7	8	4	-
	46		BF	1	-	-	-	1	-	1	-	7	2	7	11	16	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morehouse	400	12.7	ALL	7	-	-	1	4	3	4	16	28	50	80	107	100	-
	137		WM	1	-	-	1	2	1	1	10	14	16	33	45	13	-
	117		WF	-	-	-	-	-	-	2	-	5	11	16	34	49	-
	66		BM	4	-	-	-	2	1	1	1	4	12	15	14	12	-
	79		BF	2	-	-	-	-	1	-	5	5	10	16	14	26	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Natchitoches	386	10.3	ALL	6	3	1	3	2	2	11	14	31	41	77	101	94	-
	115		WM	3	1	-	2	-	-	2	3	7	11	30	39	17	-
	138		WF	1	-	-	-	-	-	2	6	10	18	22	30	49	-
	74		BM	2	2	-	1	2	2	6	1	7	8	14	17	12	-
	59		BF	-	-	1	-	-	-	1	4	7	4	11	15	16	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Orleans	5079	11.0	ALL	72	17	11	17	44	60	178	288	429	576	920	1250	1214	3
	911		WM	8	1	-	1	3	6	12	47	80	90	177	263	223	-
	1040		WF	5	-	1	-	-	2	9	15	24	50	144	301	489	-
	1575		BM	26	10	7	11	30	38	97	153	202	261	279	313	146	2
	1515		BF	30	6	3	5	10	12	56	71	121	168	312	369	351	1
	23		OM	-	-	-	-	1	2	4	2	1	4	5	2	2	-
	15		OF	3	-	-	-	-	-	-	-	1	3	3	2	3	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
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Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Ouachita	1333	9.0	ALL	24	-	1	3	9	18	34	49	96	161	245	351	342	-
	412		WM	5	-	1	1	4	6	10	15	37	61	93	114	65	-
	499		WF	6	-	-	-	3	3	6	9	17	46	75	159	175	-
	194		BM	7	-	-	1	2	7	11	13	32	29	37	28	27	-
	227		BF	6	-	-	1	-	2	7	12	10	25	40	49	75	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plaquemines	215	8.4	ALL	-	-	-	1	7	3	5	11	13	35	60	51	29	-
	82		WM	-	-	-	1	3	1	1	4	6	11	20	26	9	-
	72		WF	-	-	-	-	1	1	1	1	2	12	21	17	16	-
	33		BM	-	-	-	-	1	1	2	3	2	8	12	3	1	-
	25		BF	-	-	-	-	2	-	1	2	2	4	7	4	3	-
	2		OM	-	-	-	-	-	-	-	1	1	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Pointe Coupee	236	10.2	ALL	4	-	1	-	3	5	3	16	14	25	47	64	54	-
	62		WM	-	-	1	-	1	2	-	4	4	9	18	13	10	-
	71		WF	1	-	-	-	-	1	-	3	2	1	14	27	22	-
	59		BM	3	-	-	-	2	1	3	6	5	12	10	11	6	-
	44		BF	-	-	-	-	-	1	-	3	3	3	5	13	16	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapides	1311	10.2	ALL	17	1	1	6	10	11	27	48	82	146	259	371	332	-
	463		WM	1	1	-	1	5	4	13	12	30	56	113	151	76	-
	470		WF	1	-	1	2	3	2	5	13	19	43	66	141	174	-
	176		BM	9	-	-	1	1	4	7	12	16	21	48	32	25	-
	198		BF	6	-	-	2	-	1	2	11	17	26	31	46	56	-
	2		OM	-	-	-	-	-	-	-	-	-	-	1	1	-	-
	2		OF	-	-	-	-	1	-	-	-	-	-	-	-	1	-
Red River	97	10.0	ALL	3	-	-	1	-	1	3	1	7	10	14	26	31	-
	31		WM	-	-	-	-	-	-	1	-	1	2	7	10	10	-
	42		WF	2	-	-	-	-	-	1	-	3	2	5	11	18	-
	11		BM	1	-	-	-	-	-	1	-	2	5	-	2	-	-
	12		BF	-	-	-	1	-	1	-	1	1	-	2	3	3	-
	1		OM	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Richland	264	12.7	ALL	9	-	-	1	1	3	-	6	14	40	38	70	82	-
	86		WM	2	-	-	-	1	1	-	2	7	17	15	23	18	-
	93		WF	-	-	-	1	-	-	-	-	1	11	10	31	39	-
	47		BM	4	-	-	-	-	-	-	3	6	9	6	9	10	-
	36		BF	3	-	-	-	-	2	-	1	-	3	6	7	14	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	1		OF	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Sabine	278	12.0	ALL	7	2	-	1	2	4	7	10	21	29	59	62	74	-
	128		WM	3	-	-	1	2	2	4	5	10	20	30	27	24	-
	97		WF	2	-	-	-	-	-	-	1	6	6	19	25	38	-
	29		BM	1	1	-	-	-	2	1	2	4	1	4	8	5	-
	24		BF	1	1	-	-	-	-	2	2	1	2	6	2	7	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Bernard	737	11.0	ALL	6	2	-	1	3	10	11	32	39	85	172	230	146	-
	343		WM	2	-	-	1	1	8	4	20	15	43	84	111	54	-
	349		WF	3	2	-	-	1	1	5	8	16	35	77	111	90	-
	24		BM	1	-	-	-	1	1	2	2	5	4	5	3	-	-
	16		BF	-	-	-	-	-	-	-	2	3	2	4	3	2	-
	2		OM	-	-	-	-	-	-	-	-	-	1	-	1	-	-
	3		OF	-	-	-	-	-	-	-	-	-	-	2	1	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
St. Charles	334	7.0	ALL	1	1	1	-	-	3	4	16	39	43	83	87	56	-
	125		WM	-	1	-	-	-	2	1	7	13	14	36	36	15	-
	111		WF	-	-	-	-	-	1	1	3	10	14	23	28	31	-
	42		BM	-	-	-	-	-	-	1	4	7	8	12	6	4	-
	56		BF	1	-	1	-	-	-	1	2	9	7	12	17	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Helena	106	11.8	ALL	-	-	-	1	1	-	1	3	9	15	22	33	21	-
	22		WM	-	-	-	-	-	-	1	-	1	2	8	7	3	-
	37		WF	-	-	-	-	-	-	-	-	2	2	5	14	14	-
	33		BM	-	-	-	1	1	-	-	3	3	8	8	6	3	-
	14		BF	-	-	-	-	-	-	-	-	3	3	1	6	1	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. James	171	8.0	ALL	2	1	2	2	1	-	6	8	11	23	36	44	35	-
	47		WM	-	-	-	1	-	-	2	2	1	3	8	16	14	-
	48		WF	-	1	1	-	-	-	2	1	3	4	8	14	14	-
	37		BM	-	-	-	1	-	-	1	3	4	6	11	5	6	-
	39		BF	2	-	1	-	1	-	1	2	3	10	9	9	1	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. John	319	7.7	ALL	3	3	-	-	4	6	9	20	21	42	67	82	62	-
	91		WM	-	1	-	-	1	-	4	6	5	20	20	26	8	-
	103		WF	-	-	-	-	1	-	4	7	2	6	24	27	32	-
	59		BM	2	1	-	-	2	6	-	3	6	9	11	13	6	-
	66		BF	1	1	-	-	-	-	1	4	8	7	12	16	16	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Landry	901	10.8	ALL	19	2	-	6	12	14	13	50	69	105	169	233	209	-
	286		WM	4	-	-	3	6	5	10	16	12	37	81	64	48	-
	277		WF	2	-	-	1	2	2	-	4	14	30	41	82	99	-
	173		BM	9	2	-	1	2	4	2	16	25	18	24	41	29	-
	164		BF	4	-	-	1	2	3	1	14	18	19	23	46	33	-
	1		OM	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Martin	367	7.7	ALL	10	1	1	1	4	6	10	11	33	44	75	96	75	-
	128		WM	2	-	-	-	2	1	5	3	13	15	30	40	17	-
	126		WF	-	-	-	-	2	1	1	2	8	9	28	33	42	-
	57		BM	4	-	-	1	-	2	3	5	5	10	8	15	4	-
	55		BF	4	1	1	-	-	2	1	1	7	10	9	8	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	-	1	-
St. Mary	496	8.7	ALL	9	5	-	-	4	4	16	26	35	60	103	129	104	1
	174		WM	1	1	-	-	2	-	6	8	16	22	44	44	29	1
	170		WF	2	1	-	-	2	1	1	5	10	12	31	53	52	-
	79		BM	4	2	-	-	-	3	6	7	5	14	15	15	8	-
	69		BF	2	1	-	-	-	-	3	6	4	10	13	17	13	-
	3		OM	-	-	-	-	-	-	-	-	-	2	-	-	1	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	-	1	-
St. Tammany	1371	7.3	ALL	21	5	3	3	9	11	26	62	102	165	281	392	291	-
	611		WM	10	2	-	2	5	8	16	34	52	80	148	177	77	-
	598		WF	4	-	-	-	2	2	6	17	36	47	114	173	197	-
	91		BM	5	1	3	-	2	1	3	9	7	23	11	18	8	-
	65		BF	2	2	-	1	-	-	-	1	6	13	8	23	9	-
	4		OM	-	-	-	-	-	-	-	1	1	1	-	1	-	-
	2		OF	-	-	-	-	-	-	1	-	-	1	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1999

Parish	Total	Rate*	Race Sex	Age in Years													
				LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Tangipahoa	946	9.8	ALL	12	6	2	1	3	11	29	50	73	108	195	252	204	-
	323		WM	1	1	-	1	1	7	15	15	25	34	82	93	48	-
	360		WF	1	2	-	-	-	-	2	14	20	32	60	103	126	-
	134		BM	5	2	2	-	2	2	8	14	16	25	30	19	9	-
	127		BF	5	1	-	-	-	2	4	6	12	17	23	36	21	-
	1		OM	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Tensas	71	11.2	ALL	1	-	-	-	-	-	3	-	7	7	16	24	13	-
	13		WM	1	-	-	-	-	-	1	-	1	-	3	5	2	-
	15		WF	-	-	-	-	-	-	-	-	1	2	4	5	3	-
	17		BM	-	-	-	-	-	-	2	-	4	2	3	4	2	-
	26		BF	-	-	-	-	-	-	-	-	1	3	6	10	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terrebonne	813	7.8	ALL	21	1	2	5	5	10	16	43	71	116	159	222	142	-
	348		WM	3	-	1	2	4	8	8	28	38	52	69	91	44	-
	300		WF	4	-	1	-	-	1	6	5	14	45	53	93	78	-
	85		BM	10	-	-	2	1	1	2	7	10	13	17	18	4	-
	62		BF	3	1	-	-	-	-	-	1	8	5	14	18	12	-
	4		OM	-	-	-	-	-	-	-	-	-	-	3	1	-	-
	14		OF	1	-	-	1	-	-	-	2	1	1	3	1	4	-
Union	249	11.2	ALL	3	1	3	5	6	2	2	9	13	23	44	71	67	-
	80		WM	-	-	-	2	2	-	2	5	5	6	17	24	17	-
	96		WF	-	-	-	1	2	1	-	2	4	8	13	30	35	-
	39		BM	3	-	1	1	1	1	-	1	1	6	9	11	4	-
	34		BF	-	1	2	1	1	-	-	1	3	3	5	6	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermilion	487	9.4	ALL	7	-	1	-	6	5	10	15	30	58	81	132	142	-
	215		WM	3	-	1	-	2	3	7	7	19	36	38	65	34	-
	210		WF	2	-	-	-	1	-	1	4	10	13	30	52	97	-
	35		BM	1	-	-	-	3	2	2	3	1	6	8	7	2	-
	23		BF	-	-	-	-	-	-	-	1	-	2	5	8	7	-
	1		OM	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		OF	-	-	-	-	-	-	-	-	-	1	-	-	2	-
Vernon	339	7.1	ALL	4	-	2	2	4	6	6	11	19	59	73	80	73	-
	163		WM	1	-	-	1	3	6	3	7	12	30	35	42	23	-
	152		WF	-	-	2	1	-	-	1	3	6	26	32	35	46	-
	9		BM	1	-	-	-	1	-	-	1	1	-	3	1	1	-
	15		BF	2	-	-	-	-	-	2	-	-	3	3	2	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	535	12.0	ALL	7	1	1	2	3	6	8	27	39	62	108	149	122	-
	169		WM	1	-	-	2	1	2	5	11	9	25	38	45	30	-
	205		WF	2	1	1	-	1	1	2	6	8	17	35	72	59	-
	92		BM	4	-	-	-	1	3	1	7	14	14	17	17	14	-
	69		BF	-	-	-	-	-	-	-	3	8	6	18	15	19	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Webster	570	13.3	ALL	8	-	1	3	3	3	7	13	40	60	99	176	157	-
	204		WM	3	-	-	2	-	3	2	3	16	21	39	69	46	-
	186		WF	1	-	-	-	1	-	2	3	6	17	27	69	60	-
	81		BM	4	-	-	-	2	-	-	4	9	10	19	17	16	-
	99		BF	-	-	1	1	-	-	3	3	9	12	14	21	35	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish Louisiana, 1999																	
				Age in Years													
Parish	Total	Rate*	Race Sex	LT 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
W. Baton Rouge	178	8.7	ALL	3	-	-	-	-	1	4	11	23	24	46	35	31	-
	47		WM	-	-	-	-	-	-	2	-	7	8	15	8	7	-
	46		WF	-	-	-	-	-	-	1	3	4	6	12	9	11	-
	48		BM	3	-	-	-	-	-	-	7	7	6	12	9	4	-
	37		BF	-	-	-	-	-	1	1	1	5	4	7	9	9	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Carroll	163	13.4	ALL	-	1	-	-	-	-	2	8	12	12	25	53	50	-
	73		WM	-	1	-	-	-	-	2	7	6	7	13	19	18	-
	68		WF	-	-	-	-	-	-	-	1	3	2	9	30	23	-
	10		BM	-	-	-	-	-	-	-	-	2	3	-	1	4	-
	12		BF	-	-	-	-	-	-	-	-	1	-	3	3	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Feliciana	79	5.8	ALL	-	-	1	-	1	3	2	8	15	9	12	15	13	-
	26		WM	-	-	1	-	1	3	1	2	6	2	2	7	1	-
	17		WF	-	-	-	-	-	-	-	1	2	3	3	4	4	-
	25		BM	-	-	-	-	-	-	1	5	7	3	5	2	2	-
	11		BF	-	-	-	-	-	-	-	-	-	1	2	2	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Winn	208	12.0	ALL	3	-	-	-	1	-	9	9	13	22	38	62	51	-
	71		WM	-	-	-	-	-	-	4	3	3	7	22	21	11	-
	81		WF	-	-	-	-	1	-	1	4	4	8	9	34	20	-
	30		BM	2	-	-	-	-	-	4	-	5	4	5	2	8	-
	26		BF	1	-	-	-	-	-	-	2	1	3	2	5	12	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Rate per 1,000 population
Source: Louisiana State Center for Health Statistics (final 1999 data)

Age-Adjusted Mortality Rate for Total Deaths

The age-adjusted death rate from all causes for Louisiana in 1999 was 1034.3 per 100,000 2000 U.S. standard population. It is important to note that the procedure used to calculate age-adjusted death rates was extensively revised beginning with 1999 deaths. Because of this revision, Louisiana's 1999 age-adjusted death rate appears to be drastically higher than the 1998 rate, i.e, 576.3 per 100,000 population in 1998 (as reported in the 'Neighboring State' comparison table at the beginning of this section) versus 1034.3 per 100,000 population in 1999. This large increase is an artifact of the changes in the rate calculation methodology.

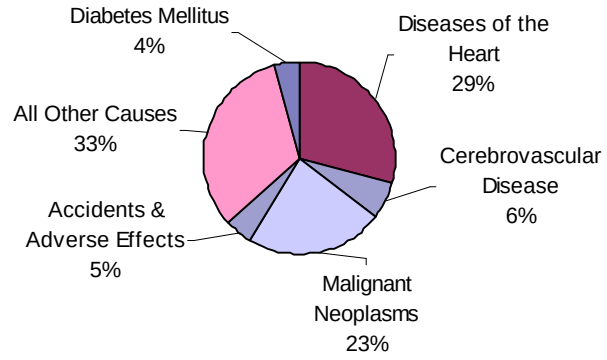
Leading Causes of Death

Beginning with deaths occurring in 1999, the United States has adopted the World Health Organization's tenth revision of the International Classification of Diseases (ICD-10) guidelines for coding cause of death information recorded on death certificates. Because ICD-10 incorporates changes in the way causes of death are grouped to produce cause-of-death statistics, death statistics generated under ICD-9 (1979-1998) and ICD-10 might not be comparable for some causes of death. It is important to be aware of these potential comparability issues when viewing and evaluating changes in death rates over time.

Although this year's *Health Report Card* is reporting 1999 Louisiana final mortality statistics for leading causes of death, 1999 national-level mortality statistics for leading causes of death have not yet been published by the National Center for Health Statistics. Therefore, 1998 national final mortality statistics are being presented in this year's *Health Report Card* discussion of deaths from specific causes.

Of the total 40,976 deaths to Louisiana residents in 1999, the leading causes of death were (in order) diseases of the heart, malignant neoplasms (cancer), cerebrovascular disease (stroke), accidents, and diabetes, as displayed in the figure below. Sixty-seven percent of all deaths in Louisiana in 1999 are attributable to these five causes.

Percents of Deaths from the Five Leading Causes of Death
Louisiana, 1999



Source: Louisiana State Center for Health Statistics (final 1999 data)

The top four causes - diseases of the heart, malignant neoplasms, cerebrovascular disease, and accidents - together account for 63% of total deaths. Little variation was observed between their 1999 and 1998 crude death rates. In fact, these top four causes have consistently been the leading causes of death in Louisiana for the past twenty years, though the rankings may have changed. The fifth-ranked cause has varied among diabetes, chronic obstructive pulmonary disease (COPD), and influenza and pneumonia. When comparing Louisiana (1999 final data) to the nation as a whole (1998 final data), the three leading causes of death in the state are identical to those of the nation. However, diabetes is a more serious problem in the state (5th) than on the national level (7th), and accidents are ranked higher in Louisiana (4th) than nationally (5th).

Although the last two decades have see a dramatic downward trend in diseases of the heart, Louisiana's number one cause of death, the 1999 crude death rate of 273.2 deaths per 100,000 population was slightly higher than the 1998 rate of 270.8. When we look beyond the top five causes of death in Louisiana in 1999, we find chronic lower respiratory diseases; influenza and

pneumonia; nephritis, nephrotic syndrome, and nephrosis; septicemia; Alzheimer's disease; suicide; and homicide rounding out the top twelve causes of death in the state.

The age-adjusted death rates for the leading causes of death in Louisiana were determined by ranking the crude death rates from the highest to lowest and then adjusting these rates (in the same order) for age.

The top five cause-specific, age-adjusted death rates for Louisiana in 1999 were the same as in 1998:

- Diseases of the heart
- Cancer
- Cerebrovascular disease
- Accidents and adverse effects
- Diabetes mellitus

Because of the aforementioned changes in death classifications and in the age-adjustment procedure, the U.S. National Center for Health Statistics has not yet released 1999 national mortality statistics. Therefore, no comparisons between Louisiana and national mortality data are being presented in this year's *Health Report Card*.

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana, 1999

*Rank***	*Cause of Death*	*Age-Adjusted Death Rate*
-	All Causes	1034.3
1	Diseases of the Heart	306.6
2	Malignant Neoplasms	232.8
3	Cerebrovascular Disease	69.1
4	Accidents	44.6
5	Diabetes Mellitus	42.4
6	Chronic Lower Respiratory Diseases	40.8
7	Influenza and Pneumonia	25.9
8	Nephritis, Nephrotic Syndrome, and Nephrosis	23.4
9	Septicemia	18.2
10	Alzheimer's Disease	18.4

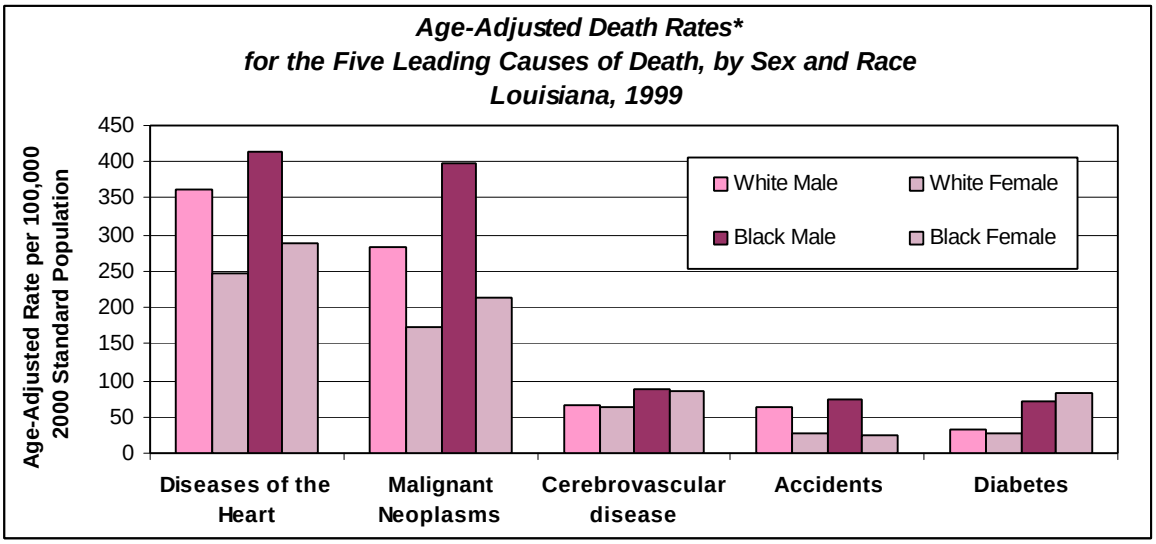
*Rate per 100,000 2000 U.S. standard population

**Causes of death are ranked based on crude death rates before adjusting for age

Source: Louisiana State Center for Health Statistics (final 1999 data)

The following chart illustrates the use of age-adjusted mortality rates when comparing mortality in different population groups. This chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 1999.

The age-adjusted rates show that males, particularly black males, are at higher risk than females for death from heart disease, cancer, and accidents. Blacks are at higher risk than whites for death from diabetes and cerebrovascular disease.



*Rate per 100,000 2000 U.S. standard population
Source: Louisiana State Center for Health Statistics

The following table lists age-adjusted mortality rates for the four major race-sex groups in 1999.

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race and Sex Louisiana, 1999	
Cause of Death/Race/Sex	**1999**
Diseases of the Heart	306.6
White Male	361.6
White Female	246.1
Black Male	414.1
Black Female	289.3
Malignant Neoplasm	232.8
White Male	282.5
White Female	173.3
Black Male	398.0
Black Female	215.0
Cerebrovascular Diseases	69.1
White Male	64.6
White Female	62.2
Black Male	86.8
Black Female	86.4
Accidents	44.6
White Male	63.5
White Female	26.8
Black Male	73.0
Black Female	24.2

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race and Sex Louisiana, 1999	
Cause of Death/Race/Sex	**1999**
Diabetes	42.4
White Male	33.3
White Female	28.2
Black Male	71.3
Black Female	83.4
Chronic Lower Respiratory Diseases	40.8
White Male	55.9
White Female	37.1
Black Male	50.7
Black Female	18.7
Influenza and Pneumonia	25.9
White Male	30.1
White Female	23.0
Black Male	34.0
Black Female	23.4
Nephritis, Nephrotic Syndrome and Nephrosis	23.4
White Male	24.4
White Female	16.7
Black Male	40.8
Black Female	33.1
Septicemia	18.2
White Male	14.9
White Female	13.5
Black Male	33.9
Black Female	29.9
Alzheimer's Disease	18.4
White Male	18.6
White Female	21.4
Black Male	10.0
Black Female	12.2
Suicide	12.0
White Male	24.7
White Female	5.6
Black Male	12.0
Black Female	1.7
Homicide	10.7
White Male	5.5
White Female	2.8
Black Male	43.2
Black Female	8.3

*Rate per 100,000 2000 U.S. standard population

Source: Louisiana State Center for Health Statistics

Infant Deaths

Overview

Infant mortality encompasses all deaths that occur within the first year of life and excludes fetal deaths (miscarriages and abortions). This measure can be a significant predictor of the health status of a particular area, population, or nation, since it is associated with many factors, such as socioeconomic status and access to health care.

There are several measures used to describe mortality in this age group. While infant mortality measures deaths during the first year, neonatal mortality describes deaths occurring through the first 27 days after birth. Other measures include post-neonatal mortality (deaths occurring from 28 days to one year after birth), hebdomadal mortality (deaths occurring during the first seven days after birth), and perinatal mortality (fetal deaths plus deaths occurring during the first seven days after birth).

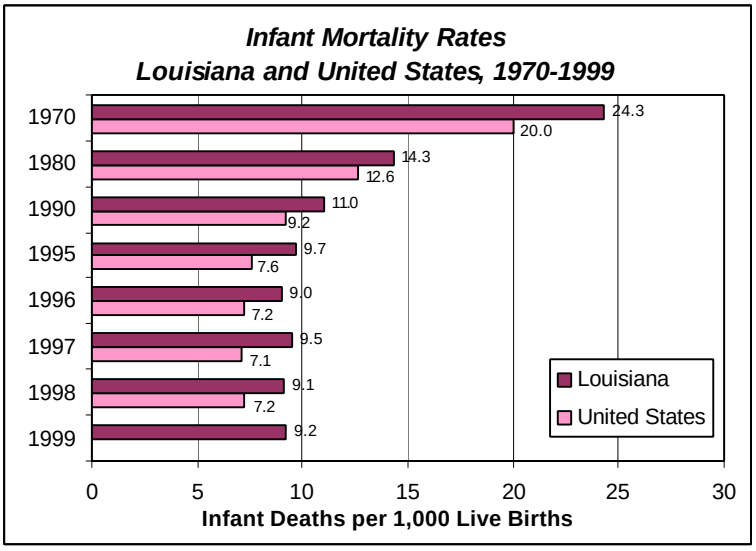
Infant Mortality Rates by Race of Child*
Louisiana, 1999

Race	Number of Deaths	Infant Mortality Rate	Neonatal Mortality Rate	Post-Neonatal Mortality Rate	Hebdomadal Mortality Rate	Perinatal Mortality Rate
Total	618	9.2	5.8	3.4	4.5	12.6
White	227	5.9	3.7	2.2	2.7	8.8
Black	385	14.1	9.1	5.1	7.2	18.2
Other	6	4.1	1.4	2.8	0.7	8.9

*All rates, except perinatal, are per 1,000 live births. Perinatal rates are per 1,000 stillbirths + live births
Source: Louisiana State Center for Health Statistics (final 1999 data)

Infant Mortality

Infant mortality is defined as death during the first year of life. This measure excludes fetal deaths (abortions and miscarriages). In 1999 in the state of Louisiana, there were 618 deaths to children under one year of age. The infant mortality rate is defined as the number of deaths within the first year of life per 1,000 live births. As shown in the figure below, the infant mortality rate dropped steadily until the mid 1990s, at which point it reached a plateau. The greatest drop occurred between 1970 and 1980, a 41% reduction. Since 1990, the infant mortality rate has



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics

seen an overall decline of 16%, from 11.0 deaths per 1000 live births in 1990 to 9.2 in 1999.

While the trend in Louisiana reflects a decline in infant mortality rates over the past several decades, the rate is still high compared with the national infant mortality rate. The state mortality rate has been at least 20% greater than the national rate since 1992. In both 1997 and 1998, the United States rate was 7.2 deaths per 1,000 live births. By international standards, even this national rate is high. In 1993, 24 other countries' infant mortality rates were lower than the United States.[14]

There are geographic variations in infant mortality as well. As shown in the parish-level tables that follow this section, rates range from 1.5 to 25.9, with the infant mortality rate for Franklin parish being seventeen times that of St. Charles parish.

In the table below, infant mortality rates are furnished to provide an idea of Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1999 mortality rate is available and is reported in this document, National Center for Health Statistics final 1998 mortality data for all states have been used in the table below to permit comparison with surrounding states.) While all except Texas' rate are well above the national figure, Louisiana's infant mortality rate lies in the middle of the spectrum of the neighboring state rates.

Infant Mortality Rates*
Louisiana, Neighboring States, and the United States, 1998

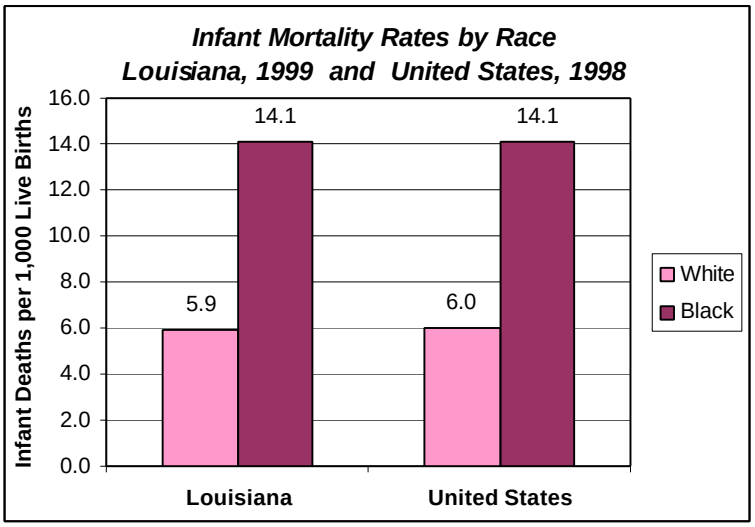
State	*Rate*	*Ranking*
Alabama	10.2	1
Arkansas	8.9	8
Louisiana	9.1	6
Mississippi	10.1	2
Texas	6.4	40
United States	7.2	-

*Rate per 1,000 live births

Source: National Center for Health Statistics (final 1998 data)

Infant mortality rates differ substantially by race. Though rates of infant deaths are decreasing across racial groups, children born to black mothers tend to have higher infant mortality rates than those born to white mothers. It is important to note that starting in 1989, the race of the mother is used for analyses instead of the race of the child, so race-specific infant mortality rates prior to 1989 are not comparable with more current rates. In 1999, there were 227 white, 385 black, and 6 other race deaths in Louisiana. The infant mortality rates were 5.9, 14.1, and 4.1 deaths per 1,000 race-specific live births respectively. The overall infant mortality rate for blacks is double that of whites.

[14] National Center for Health Statistics. *Health, United States 1996-1997 and Injury Chartbook*. Hyattsville, Maryland, 1997.

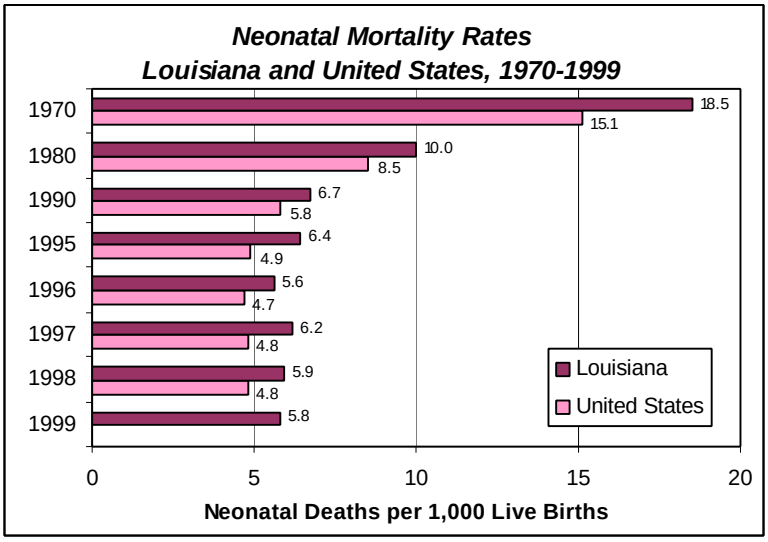


Source: Louisiana State Center for Health Statistics (final 1999 data)
National Center for Health Statistics (final 1998 data)

Neonatal Mortality

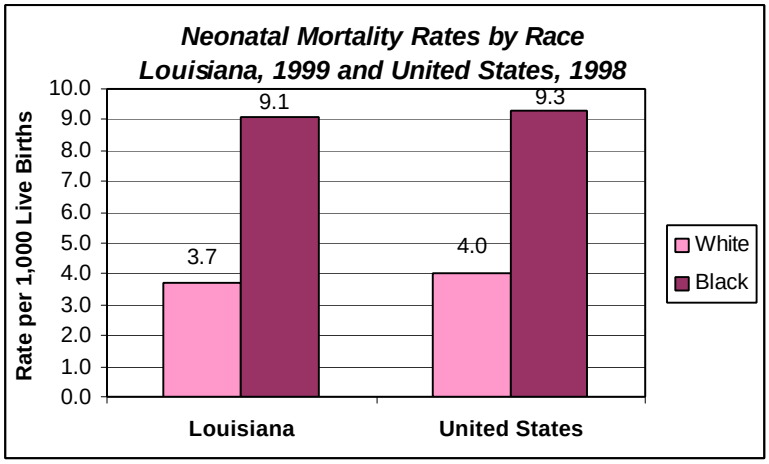
Neonatal mortality represents the period from birth through the first 27 days of life, and the neonatal mortality rate is calculated as the number of deaths during this period per 1,000 live births. In 1999, 392 neonatal deaths accounted for 63% of total infant deaths. The overall neonatal mortality rate was 5.8 per 1,000 live births. This is only slightly lower than the 1998 rate of 5.9 per 1,000 live births.

Displayed in the figure below is the pattern of neonatal mortality in Louisiana and the United States. The state rate has been decreasing, though it is still higher than the national rate.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics

Racial disparity is still observed; Louisiana's 1999 neonatal mortality rate for whites was 3.7 per 1,000 live births, while the rate for blacks was twice as high at 9.1 per 1,000 live births. While Louisiana's overall rate is higher than the national rate, the state's race-specific rates are slightly lower than those of the United States.



Source: Louisiana State Center for Health Statistics (final 1999 data)
National Center for Health Statistics (final 1998 data)

**Infant Mortality by Parish and Race of Mother
Louisiana, 1995-1999**

Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
State	All	618	9.2	9.3
	White	227	5.9	6.2
	Black	385	14.1	13.9
	Other	6	4.1	3.8
Acadia	All	8	8.5	10.9
	White	<5	5.5	8.4
	Black	<5	18.8	18.1
	Other	-	-	-
Allen	All	<5	8.2	4.8
	White	<5	10.5	4.6
	Black	-	-	5.9
	Other	-	-	-
Ascension	All	7	5.3	8.2
	White	<5	4.1	5.7
	Black	<5	9.4	15.6
	Other	-	-	-
Assumption	All	<5	13.5	11.6
	White	<5	11.7	13.7
	Black	<5	16.3	9.0
	Other	-	-	-
Avoyelles	All	5	8.1	9.0
	White	-	-	6.4
	Black	5	22.6	13.7
	Other	-	-	-
Beauregard	All	<5	4.6	8.2
	White	<5	5.4	7.7
	Black	-	-	11.8
	Other	-	-	-

Infant Mortality by Parish and Race of Mother Louisiana, 1995-1999				
Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
Bienville	All	-	-	10.1
	White	-	-	3.9
	Black	-	-	17.0
	Other	-	-	-
Bossier	All	9	6.1	7.5
	White	5	4.7	5.6
	Black	<5	10	12.9
	Other	-	-	6.6
Caddo	All	52	14.2	12.1
	White	12	7.4	6.0
	Black	40	20.3	17.5
	Other	-	-	-
Calcasieu	All	26	9.1	8.9
	White	12	6	6.7
	Black	14	17.1	14.0
	Other	-	-	7.8
Caldwell	All	-	-	4.7
	White	-	-	5.9
	Black	-	-	-
	Other	-	-	-
Cameron	All	<5	24	11.0
	White	<5	25.2	11.8
	Black	-	-	-
	Other	-	-	-
Catahoula	All	-	-	6.8
	White	-	-	6.3
	Black	-	-	7.6
	Other	-	-	-
Claiborne	All	-	-	10.4
	White	-	-	2.5
	Black	-	-	16.2
	Other	-	-	-
Concordia	All	<5	9.9	9.1
	White	<5	13.4	8.1
	Black	<5	6.7	10.1
	Other	-	-	-
Desoto	All	6	15.2	12.5
	White	<5	4.8	7.8
	Black	5	26.5	17.1
	Other	-	-	-
E Baton Rouge	All	60	9.7	11.1
	White	11	3.8	4.7
	Black	49	15.3	17.5
	Other	-	-	5.2
East Carroll	All	<5	13.3	3.7
	White	-	-	-
	Black	<5	16.7	4.8
	Other	-	-	-

Infant Mortality by Parish and Race of Mother Louisiana, 1995-1999				
Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
E Feliciana	All	<5	9.5	11.7
	White	<5	18.2	10.7
	Black	-	-	12.9
	Other	-	-	-
Evangeline	All	<5	7.6	9.2
	White	<5	3	6.7
	Black	<5	15.2	13.5
	Other	-	-	-
Franklin	All	9	25.9	11.5
	White	6	29.6	11.0
	Black	<5	21	12.2
	Other	-	-	-
Grant	All	<5	7.1	8.2
	White	<5	8	7.9
	Black	-	-	10.4
	Other	-	-	-
Iberia	All	13	10.7	10.4
	White	7	9.6	7.2
	Black	6	13.4	14.8
	Other	-	-	11.7
Iberville	All	<5	4.3	8.3
	White	<5	4.6	3.9
	Black	<5	4.1	11.7
	Other	-	-	-
Jackson	All	-	-	5.0
	White	-	-	4.4
	Black	-	-	6.2
	Other	-	-	-
Jefferson	All	45	7.1	7.8
	White	16	4	5.8
	Black	29	14.7	12.9
	Other	-	-	2.2
Jeff Davis	All	<5	3.9	6.7
	White	<5	2.5	5.7
	Black	<5	8.8	10.5
	Other	-	-	-
Lafayette	All	27	9.3	9.9
	White	17	8.8	6.8
	Black	10	11	17.1
	Other	-	-	-
Lafourche	All	20	16.2	8.8
	White	12	12.8	7.8
	Black	7	27.8	13.4
	Other	<5	22.2	5.0
Lasalle	All	-	-	4.3
	White	-	-	4.9
	Black	-	-	-
	Other	-	-	-

Infant Mortality by Parish and Race of Mother Louisiana, 1995-1999				
Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
Lincoln	All	<5	5.5	9.3
	White	<5	3.8	5.5
	Black	<5	7.1	13.2
	Other	-	-	-
Livingston	All	8	5.5	7.3
	White	5	3.7	6.0
	Black	<5	38	24.7
	Other	-	-	-
Madison	All	<5	4.1	8.5
	White	-	-	3.2
	Black	<5	5.7	10.6
	Other	-	-	-
Morehouse	All	7	14.9	17.3
	White	<5	4.7	8.4
	Black	6	23.4	24.4
	Other	-	-	-
Natchitoches	All	6	10.4	10.7
	White	<5	14.5	5.6
	Black	<5	6.7	16.0
	Other	-	-	-
Orleans	All	72	9.4	9.7
	White	13	9.2	7.3
	Black	56	9.2	10.4
	Other	<5	15.6	4.6
Ouachita	All	24	11.2	9.5
	White	11	9.8	5.4
	Black	13	13.1	14.6
	Other	-	-	-
Plaquemines	All	-	-	6.5
	White	-	-	6.8
	Black	-	-	5.2
	Other	-	-	10.5
Pointe Coupee	All	<5	10.8	8.8
	White	<5	4.8	7.8
	Black	<5	18.8	9.8
	Other	-	-	-
Rapides	All	17	8.5	10.5
	White	<5	1.7	7.0
	Black	15	18.8	15.8
	Other	-	-	7.6
Red River	All	<5	21.3	7.3
	White	<5	31.3	8.9
	Black	<5	13.2	5.9
	Other	-	-	-
Richland	All	9	25	12.3
	White	<5	10.6	10.4
	Black	7	40.7	14.3
	Other	-	-	-

Infant Mortality by Parish and Race of Mother Louisiana, 1995-1999				
Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
Sabine	All	7	21.9	13.2
	White	5	21.6	10.4
	Black	<5	27.8	21.6
	Other	-	-	12.3
St Bernard	All	6	7.2	4.9
	White	5	6.9	4.5
	Black	<5	11.8	10.2
	Other	-	-	-
St Charles	All	<5	1.5	5.3
	White	-	-	3.3
	Black	<5	4.6	9.8
	Other	-	-	-
St Helena	All	-	-	11.0
	White	-	-	12.3
	Black	-	-	10.1
	Other	-	-	-
St James	All	<5	6.1	11.0
	White	-	-	10.9
	Black	<5	9.2	11.1
	Other	-	-	-
St John	All	<5	4.3	8.1
	White	-	-	2.9
	Black	<5	8.2	13.8
	Other	-	-	-
St Landry	All	19	13.6	9.9
	White	6	8.7	6.1
	Black	13	18.7	13.9
	Other	-	-	-
St Martin	All	10	13.2	10.8
	White	<5	4.3	6.5
	Black	8	28.6	16.9
	Other	-	-	17.2
St Mary	All	9	10.2	7.8
	White	<5	5.7	4.2
	Black	6	19.4	14.2
	Other	-	-	-
St Tammany	All	21	7.8	6.4
	White	14	6.2	5.2
	Black	7	18.5	14.5
	Other	-	-	-
Tangipahoa	All	12	7.3	7.4
	White	<5	2.1	4.7
	Black	10	15.3	11.4
	Other	-	-	-
Tensas	All	<5	8.6	8.3
	White	<5	28.6	6.2
	Black	-	-	9.3
	Other	-	-	-

Infant Mortality by Parish and Race of Mother Louisiana, 1995-1999				
Parish	Race	1999 Number of Infant Deaths	1999 Infant Mortality Rate*	1995-1999 Infant Mortality Rate *
Terrebonne	All	21	13	10.6
	White	7	6.2	7.6
	Black	13	36.9	21.1
	Other	<5	7	6.4
Union	All	<5	8.9	14.1
	White	-	-	7.9
	Black	<5	22.1	26.1
	Other	-	-	-
Vermilion	All	7	8.4	8.5
	White	5	8	6.3
	Black	<5	5.6	16.2
	Other	<5	35.7	10.4
Vernon	All	<5	3.8	8.8
	White	<5	1.3	7.8
	Black	<5	14.9	14.5
	Other	-	-	-
Washington	All	7	10.1	11.8
	White	<5	7.1	8.9
	Black	<5	15	16.4
	Other	-	-	-
Webster	All	8	14.3	9.2
	White	<5	11.8	5.6
	Black	<5	18.3	14.1
	Other	-	-	-
W Baton Rouge	All	<5	9.7	9.1
	White	-	-	3.2
	Black	<5	23.8	16.9
	Other	-	-	-
West Carroll	All	-	-	2.6
	White	-	-	3.4
	Black	-	-	-
	Other	-	-	-
W Feliciana	All	-	-	10.2
	White	-	-	6.6
	Black	-	-	14.2
	Other	-	-	-
Winn	All	<5	13.2	10.7
	White	-	-	4.3
	Black	<5	41.7	21.6
	Other	-	-	-

*Rate per 1,000 live births. Very small numbers of deaths, such as those seen for 1999 infant mortality, result in rates that are likely to fluctuate from year to year. To create rates that are more stable, 1995-99 five-year infant mortality rates have been calculated.

Source: Louisiana State Center for Health Statistics (final 1999 data)

Injury Deaths

Almost all injury deaths are preventable. The term "injury" includes:

a. unintentional injuries (more commonly referred to as "accidents

b. intentional injuries (suicides and homicides)

c. legal intervention (law enforcement), and operations of war, and

d. injuries in which the intent could not be determined.

The term excludes adverse effects of either medical care or therapeutic use of drugs.[15]

Injury is indicated as the underlying cause of death in approximately 8% of all deaths in Louisiana per year. Aggregation of three years of injury mortality data (1996-1998) indicates that the rate of firearm deaths (21.7 per 100,000 population) and motor-vehicle traffic deaths (21.0 per 100,000 population) greatly surpass death rates from all other causes of injury. The Louisiana INJURY RESEARCH AND PREVENTION SECTION utilizes injury mortality data as a foundation for program planning, development and evaluation.

Number and Rate* of Injury Deaths by Cause and Intent of Injury
Louisiana, 1996-1998
(N=9228)

Cause	Intent											
	Unintentional		Suicide		Homicide		Undetermined		Other		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Cut/pierce	4	0.0	11	0.1	220	1.7	1	0.0	0	0.0	236	1.8
Drowning/submersion	387	3.0	28	0.2	2	0.0	23	0.2	---	---	440	3.4
Fall	606	4.6	8	0.1	0	0.0	3	0.0	---	---	617	4.7
Fire/Burn	295	2.3	5	0.0	10	0.1	3	0.0	---	---	313	2.4
Firearm	110	0.8	1116	8.5	1587	12.1	22	0.2	7	0.1	2842	21.7
Machinery	62	0.5	---	---	---	---	---	---	---	---	62	0.5
Motor-vehicle, Traffic	2738	20.9	11	0.1	---	---	0	0.0	---	---	2749	21.0
Pedal Cyclist,other	6	0.0	---	---	---	---	---	---	---	---	6	0.0
Pedestrian, other	48	0.4	---	---	---	---	---	---	---	---	48	0.4
Transport, other	116	0.9	0	0.0	---	---	0	0.0	---	---	116	0.9
Natural,environmental	101	0.8	0	0.0	---	---	1	0.0	---	---	102	0.8
Overexertion	0	0.0	---	---	---	---	---	---	---	---	0	0.0
Poisoning	334	2.6	158	1.2	3	0.0	112	0.9	0	0.0	607	4.6
Struck by, against	68	0.5	---	---	25	0.2	---	---	0	0.0	93	0.7
Suffocation	270	2.1	179	1.4	51	0.4	0	0.0	---	---	500	3.8
Other specified	98	0.7	2	0.0	20	0.2	0	0.0	2	0.0	122	0.9
Other specified, not elsewhere classifiable	7	0.1	8	0.1	87	0.7	3	0.0	0	0.0	105	0.8
Unspecified	181	1.4	6	0.0	68	0.5	15	0.1	0	0.0	270	2.1
Total	5431	41.5	1532	11.7	2073	15.9	183	1.4	9	0.1	9228	70.6

Source: LA Office of Public Health, Vital Statistics Electronic Files

Note: "---" Indicates category not specified by International Classification of Diseases Coding System

*Rate based on 1996 Louisiana Electronic Assistance Program(LEAP) census estimates

[15] Centers for Disease Control and Prevention. "Recommended Framework for Presenting Mortality Data." *MMWR* (46:RR-14) 1997.

II. MORBIDITY

A. INFECTIOUS DISEASES

Background

Vaccines are among the most effective and reliable of medicines for people of all ages. Every year, they prevent countless serious illnesses and thousands of possible deaths. About 100 million vaccine doses are given annually in the United States, most of them to infants and children as part of their routine immunization schedule. A single dose of some vaccines gives nearly complete protection. With others, a series of doses spread over months or years is needed for the best results.

Children in particular are beneficiaries of the protection from illness that vaccines offer. Currently, there are ten diseases from which children are routinely protected through the use of standard childhood immunizations. These diseases are: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, Haemophilus influenzae B (bacterial meningitis), and varicella (chicken pox). Enormous reductions have been seen in each of these serious diseases since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the United States in 1941, but only 85 cases in 1999. Louisiana had no reported cases of measles in 1999.

Although the public is most familiar with the vaccines used for childhood immunization, there are many others that afford protection to individuals at risk of infection from other types of exposures. An example is the hepatitis A vaccine, which recently has become available to select populations, such as travelers to areas where the disease is endemic.

In addition to being reliable and effective, vaccines are also one of the most cost-effective medical procedures available. The ten vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very effective. Cost estimates show that each dollar spent on immunization saves $10-$12 in direct medical and hospitalization costs. These estimates do not include attendant costs, such as workdays lost by family members, costs for outbreak control, or the burden of lives lost to these severe diseases. A prime example is measles, which leads to the hospitalization of approximately 10% of those who become ill. Even with excellent medical care, approximately 1 out of every 1,000 cases dies, usually from measles infection of the lungs and of the brain.

The diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact, such as coughing, to others who are not immune. As a result of childhood immunization, Louisiana reported only 10 cases of pertussis in 1999. In countries where childhood immunization against pertussis has been halted, there have been large outbreaks of whooping cough. Diphtheria, another dangerous infection, which has been controlled through childhood immunization, has not been seen in Louisiana since 1972. However, in recent years, an epidemic of diphtheria occurred in Eastern Europe and Asia. Without immunization, re-introduction of diphtheria and other vaccine-preventable diseases into Louisiana via an infected person can contribute to an increase in the number of cases with subsequent development in clusters and outbreaks.

1999 Status

Hepatitis A (HAV) is a viral disease that affects the liver. The number of hepatitis A cases reported in 1999 increased by 23% from 1998. Louisiana's case rate was approximately half of the national case rate (4.9 vs. 8.6 per 100,000). Sex-race specific rates per 100,000 were highest among Caucasian males (5.1) followed by Caucasian females (4.3). Rates by age groups were highest among two different age groups: 35-44 years (36/100,000) and 25-34 years (34/100,000).

Approximately half of the 213 cases statewide reported risk factor information. Of these case reports, 13% were reported in children attending day care; 15% were contacts of a known hepatitis A case, and 21% reported exposure other than sexual or household contact. Parishes reporting the highest case rates per 100,000 include: Vermilion (132), West Feliciana (70) and Jefferson Davis (42)

Hepatitis B (HBV) is a serious public health problem that affects people of all ages in the United States and around the world. Each year an estimated 300,000 people become infected with the hepatitis B virus in the United States. The disease is caused by a virus that attacks the liver. A person can get hepatitis B by direct contact with the blood or body fluids of an infected person. A baby can get hepatitis B from an infected mother during childbirth. Symptoms of hepatitis B include yellowing of the skin or eyes, loss of appetite, nausea, vomiting, fever, extreme tiredness, or stomach pain.

The most effective means of preventing hepatitis B infection is to be immunized with the hepatitis B vaccine. Research is also being carried out on drugs that have the potential for improving treatment of chronic hepatitis.

In 1999, hepatitis B case reports decreased by 22% from 1998. Sex-specific rates continue to be higher for males than females (4.6 vs. 3.4 per 100,000). Race-specific rates were almost two times higher for African-Americans than for Caucasians (5.0 vs. 2.3 per 100,000). The 35-44 age group accounted for 32% of all reported cases. Of the 172 cases reported, 24% reported IV drug use during the six weeks to six months prior to illness; 16% reported receiving one or more tattoos. Of those reporting number of sexual partners in the six months prior to infection, 33% had greater than two sexual partners. Of the cases reporting a sexual preference, 84% were heterosexual. Parishes reporting the highest case rates per 100,000 included: Washington (14), St. Helena and Caldwell (10 each).

Hepatitis C is a viral disease that causes liver inflammation and can lead to cirrhosis and cancer of the liver. It is a disease of growing magnitude in the United States: an estimated 3.9 million (1.8%) Americans have been infected with HCV, of whom 2.7 million are chronically infected. There are approximately 36,000 new infections diagnosed in the United States each year, of which 25-30% are symptomatic. Symptoms of hepatitis C are often non-specific, but may include jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, and vomiting. Persons at increased risk of contracting hepatitis C include injecting drug users, sex contacts of infected persons, persons with multiple sex partners, recipients of blood transfusions before July 1992, health care workers exposed to blood, and infants born to infected women.

While there is no vaccine available to prevent hepatitis C, antiviral drugs such as interferon used alone or in combination with ribavirin, are approved for the treatment of persons with chronic hepatitis C.

In 1999, 302 (7.0 per 100,000) cases of acute hepatitis C were reported, a 55% increase from 1998. The case rate is higher than the 1998 national case rate of 1.3 per 100,000, but lower than the Healthy People 2000 target rate of 13.7 per 100,000. Sex-specific rates were highest among males (9.4 per 100,000) than females (4.7 per 100,000). Of all reported cases, 42% were between the ages of 35 and 44. Parishes reporting the highest case rates per 100,000 include: Calcasieu (32), Beauregard (17), E. Feliciana and Washington (16 each), and Evangeline, Bossier and St. Bernard (15 each).

Pertussis (whooping cough) is a respiratory illness that can affect all age groups, but mostly is found in infants and young children. It is caused by a bacterium called *Bordetella pertussis*. These bacteria are present in the mouths and noses of infected people. Pertussis symptoms

are the usual cold symptoms, which then develop into coughing fits with a high-pitched "whooping" sound. Pertussis can be fatal in infants.

Immunization against pertussis involves five doses of the DTaP (diphtheria, tetanus, and acellular pertussis) combination vaccination starting at age two months.

There were 10 cases reported in 1999, which is a decrease of 23% from 1998 and is the lowest reported total since 1981. Cases continue to cluster by age, with 90% of all reported cases under five years of age and no reported cases over nine years of age. Sixty percent of the cases were female. Of the 4 cases reporting vaccine histories, 2 cases had no DTP doses prior to the onset of illness, and 2 cases had at least one dose.

Mumps is a viral respiratory disease that causes swelling and pain of salivary glands in the face and neck. Mumps is spread by contact with infected people. This disease is contagious from one to two days before and until seven days after symptoms appear. It is most infectious when the swelling starts. The symptoms are fever, pain in front of the ears that increases during chewing, and swollen glands in the cheeks and sometimes under the jaw. It is most likely to affect children ages five to nine, but may occur at any age. It is likely to be more serious and painful in teenagers and adults.

Immunization against mumps involves two doses of MMR (measles, mumps and rubella) vaccine, usually at age twelve months and at four to six years.

In 1999, 11 cases of mumps were reported, an increase of 2 cases from 1998. Six cases were male; 70% were less than 15 years of age. Cases were distributed throughout Louisiana with no parish reporting more than two cases. Region VII (the Shreveport area) and Region IX (the Northshore area) each reported 3 cases. Vaccine histories of these cases were not reported.

Selected Infectious Diseases Counts
Louisiana, 1995-1999

	1995	*1996*	*1997*	*1998*	*1999*
Hepatitis A	196	261	266	173	213
Hepatitis B	244	209	208	219	172
Pertussis	22	15	22	13	10
Mumps	15	24	18	9	11

Source: Louisiana Office of Public Health, Infectious Disease Epidemiology Program

Selected Infectious Diseases Counts by Parish Louisiana, 1999							
Parish	**Hepatitis A**	**Hepatitis B**	**Measles**	**Mumps**	**Pertussis**	**Rubella**	**Total**
Louisiana	213	172	0	11	10	0	406
Acadia	12	2	0	0	0	0	14
Allen	0	2	0	0	0	0	2
Ascension	1	2	0	0	0	0	3
Assumption	0	0	0	0	0	0	0
Avoyelles	1	3	0	0	0	0	4
Beauregard	3	0	0	0	0	0	3
Bienville	0	1	0	0	0	0	1
Bossier	1	6	0	0	0	0	7
Caddo	7	12	0	2	2	0	23
Calcasieu	4	10	0	1	0	0	15
Caldwell	0	1	0	0	0	0	1
Cameron	0	0	0	0	0	0	0
Catahoula	0	1	0	0	0	0	1
Claiborne	2	0	0	0	0	0	2
Concordia	1	0	0	0	0	0	1
DeSoto	0	0	0	1	1	0	2
East Baton Rouge	9	25	0	1	0	0	35
E. Carroll	0	0	0	0	0	0	0
East Feliciana	2	0	0	0	0	0	2
Evangeline	2	0	0	0	0	0	2
Franklin	0	0	0	0	0	0	0
Grant	1	1	0	0	0	0	2
Iberia	2	4	0	0	0	0	6
Iberville	5	1	0	0	0	0	6
Jackson	1	0	0	0	0	0	1
Jefferson	9	12	0	1	2	0	24
Jefferson Davis	13	1	0	0	0	0	14
Lafayette	5	2	0	0	0	0	7
Lafourche	0	2	0	0	0	0	2
Lasalle	0	0	0	0	0	0	0
Lincoln	2	0	0	0	0	0	2
Livingston	4	2	0	0	0	0	6
Madison	0	0	0	0	0	0	0
Morehouse	0	1	0	0	0	0	1
Natchitoches	1	0	0	0	0	0	1
Orleans	17	39	0	0	1	0	57
Ouachita	6	7	0	1	0	0	14
Plaquemines	0	2	0	0	1	0	3
Pointe Coupee	0	1	0	0	0	0	1
Rapides	3	6	0	1	0	0	10
Red River	0	0	0	0	0	0	0
Richland	0	0	0	0	0	0	0
Sabine	1	0	0	0	0	0	1
St. Bernard	2	3	0	1	0	0	6

Selected Infectious Diseases Counts by Parish Louisiana, 1999							
Parish	**Hepatitis A**	**Hepatitis B**	**Measles**	**Mumps**	**Pertussis**	**Rubella**	**Total**
St. Charles	0	0	0	0	0	0	0
St. Helena	0	1	0	0	0	0	1
St. James	1	0	0	0	0	0	1
St. John the Baptist	0	0	0	0	0	0	0
St. Landry	0	5	0	0	0	0	5
St. Martin	0	1	0	0	0	0	1
St. Mary	0	1	0	0	1	0	2
St. Tammany	14	1	0	2	0	0	17
Tangipahoa	0	3	0	1	0	0	4
Tensas	0	0	0	0	0	0	0
Terrebonne	1	2	0	0	0	0	3
Union	0	0	0	0	0	0	0
Vermilion	66	2	0	0	0	0	68
Vernon	3	0	0	0	0	0	3
Washington	1	6	0	0	0	0	7
Webster	1	0	0	0	2	0	3
W. Baton Rouge	0	0	0	0	0	0	0
West Carroll	0	0	0	0	0	0	0
West Feliciana	9	1	0	0	0	0	10
Winn	0	0	0	0	0	0	0

Source: Louisiana Office of Public Health, Infectious Disease Epidemiology Program

B. TUBERCULOSIS

Background

Pulmonary Tuberculosis (TB) results from infection with an organism named Mycobacterium tuberculosis. Persons with TB may transmit the organism by coughing. If untreated, the pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs; it can also occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six months of therapy with a single anti-TB drug called isoniazid, or INH.

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as HIV. Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e. length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

2000 Status

Louisiana reported 331 cases of TB in 2000, for a case rate of 7.4 per 100,000 people. This represents a 7.3% decrease from the 1999 figure of 357 cases (8.2 per 100,000) and a 12.9% decrease since the 1998 report of 380 cases (8.7 per 100,000). Caution should be urged however; decreases over such a short period do not necessarily reflect a trend in tuberculosis control.

Tuberculosis Cases
Louisiana, 1996-2000

1996	*1997*	*1998*	*1999*	*2000*
420	406	380	357	331

Source: Louisiana Office of Public Health , Tuberculosis Program

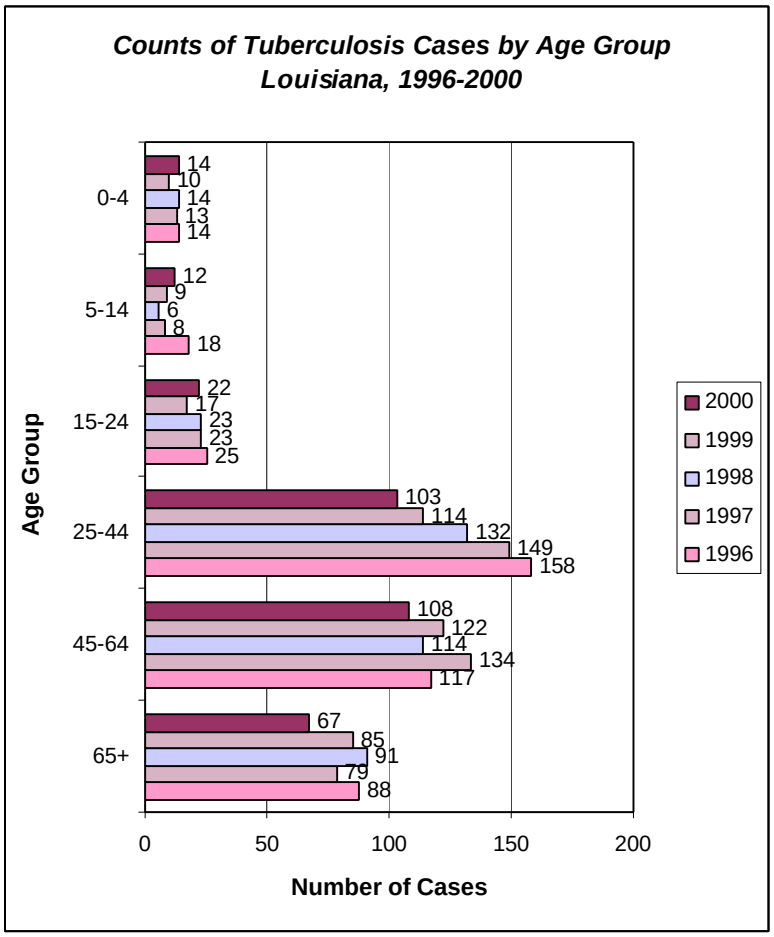
In 2000, Louisiana's state ranking for TB case rates (per 100,000) was the 6th highest in the nation. Louisiana's 2000 rate was similar to those in neighboring states, but was significantly higher than the national rate of 5.8 per 100,000. The national rate for 2000 declined 6.6% from 1999.

Tuberculosis Cases and Rates Louisiana and Neighboring States, 1999*		
State	***Number of Cases***	***Case Rate***
Alabama	312	7.0
Arkansas	199	7.4
Louisiana	331	7.4
Mississippi	173	6.1
Texas	1,506	7.2
United States	16,372	5.8

*Rate per 100,000 population
Source: Louisiana Office of Public Health, Tuberculosis Program
National Surveillance System, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Drug-resistant TB continues to be a problem in Louisiana. While only one case of multi-drug-resistant tuberculosis (MDR-TB) was reported in 2000, the incidence of single-drug (INH) resistance continues to exceed 4% -- the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB.

As shown in the following graph, increases in the number of reported cases of TB were observed in younger age groups (below age 25 years), and decreases were seen in all other age groups



Source: Louisiana Office of Public Health, Tuberculosis Program

Louisiana Tuberculosis Cases and Rates By Region and Parish, 2000

State Total = 331
State Case Rate = 7.6 per 100,000

Region/Parish	Cases	Rate/100,000
Region 1	134	13.4
Jefferson	32	7.1
Orleans	97	21.0
Plaquemines	0	0.0
St Bernard	5	7.6
Region 2	25	4.3
Ascension	1	1.4
East Baton Rouge	17	4.3
East Feliciana	3	14.2
Iberville	1	3.2
Pointe Coupee	2	8.5
West Baton Rouge	1	4.9
West Feliciana	0	0.0
Region 3	19	4.9
Assumption	0	0.0
Lafourche	4	4.5
St Charles	3	6.2
St James	0	0.0
St John The Baptist	3	7.1
St Mary	4	7.0
Terrebonne	5	4.8
Region 4	40	7.4
Acadia	2	3.5
Evangeline	4	11.7
Iberia	1	1.4
Lafayette	20	10.7
St Landry	9	10.7
St Martin	0	0.0
Vermilion	4	7.7
Region 5	17	6.1
Allen	0	0.0
Beauregard	0	0.0
Calcasieu	14	7.8
Cameron	0	0.0
Jefferson Davis	3	9.5
Region 6	13	4.3
Avoyelles	0	0.0
Catahoula	0	0.0
Concordia	2	9.7
Grant	1	5.2
La Salle	1	7.3
Rapides	6	4.7
Vernon	2	3.9
Winn	1	5.7

Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2000

State Total = 331
State Case Rate = 7.6 per 100,000

Region/Parish	Cases	Rate/100,000
Region 7	37	7.3
Bienville	2	12.7
Bossier	3	3.2
Caddo	26	10.8
Claiborne	0	0.0
De Soto	0	0.0
Natchitoches	0	0.0
Red River	0	0.0
Sabine	1	4.2
Webster	5	11.7
Region 8	30	8.6
Caldwell	0	0.0
East Carroll	1	11.5
Franklin	1	4.5
Jackson	0	0.0
Lincoln	5	12.2
Madison	3	23.1
Morehouse	5	16.0
Ouachita	13	8.9
Richland	1	4.7
Tensas	0	0.0
Union	1	4.5
West Carroll	0	0.0
Region 9	16	3.7
Livingston	3	3.3
St Helena	1	10.4
St Tammany	2	1.0
Tangipahoa	8	8.1
Washington	2	4.6

Source: Louisiana Office of Public Health, Tuberculosis Program

C. SEXUALLY TRANSMITTED DISEASES

Overview

Sexually transmitted diseases (STDs) are the most commonly reported diseases in the United States and affect almost 15.3 million Americans in all population groups each year. By age 21, one in five young adults will have received treatment for an STD. Among the most serious complications are pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects.[1]

STD Rates and National Rankings** Louisiana, 1996-2000*

Year	Primary and Secondary Syphilis		Gonorrhea		Chlamydia	
	Rate	Rank	Rate	Rank	Rate	Rank
1996	13	6	222	8	260	4
1997	9	7	255	5	273	7
1998	10	3	297	4	363	5
1999	7	3	313	3	393	4
2000	5	-	314	-	425	-

*Rates per 100,000 population 1990

**States ranked from highest to lowest disease incidence. Nationwide ranks for 2000 not available yet.

Sources: Louisiana Office of Public Health, STD Control Program 2000
CDC STD Surveillance Report 1999

Syphilis

Syphilis infections are caused by *Treponema pallidum*, aspirochete (bacteria). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days) and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and condylomata lata, sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which persons have no clinical signs or symptoms.

Louisiana had the 2nd highest rate of syphilis nationwide during 1995; then in 1996 the rate fell to the 6th highest rate, followed by a drop to 7th in 1997. In 1998 and 1999 rates rose to the 3rd highest. The total number of cases of early syphilis (primary, secondary, and early latent syphilis) is consistently declining, from 5,373 cases in 1993, to 441 cases in 2000. In 1999, 53% of early syphilis cases occurred in females, and 87% of the cases occurred in African-Americans. Sixty-six percent of early syphilis cases occurred among the 15-34 year-old population.

During the last five years, sharp and consistent declines in early syphilis rates have occurred. In the white population, the rate decreased 40% between 1995 and 1996 and 33% between 1996 and 1997. However, early syphilis rates increased 50% between 1997 and 1998 and remained unchanged in 1999. In African-Americans, the rate decreased 43% between 1995 and 1996, 40% between 1996 and 1997, 6% between 1997 and 1998, and 21% between 1998 and 1999.

[1] National Center for Health Statistics. *Healthy People 2000 Review, 1997* . Hyattsville, Maryland: Public Health Service. 1997.

Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Sex and Race Louisiana, 1995-1999									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	3	6	5	181	197	189	17	7	12
1996	2	3	3	107	109	108	2	5	4
1997	2	2	2	61	68	65	2	2	2
1998	3	3	3	64	58	61	10	7	9
1999	3	3	3	48	47	48	0	7	4

*Rate per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate for primary and secondary syphilis for 1999 was 7.0 per 100,000 people (Census 1990), and the national rate was 2.5. *The Healthy People 2000 Review 1997* objective for primary and secondary syphilis is to reduce the incidence rate to no more than 4 cases per 100,000 people and the incidence among African-Americans to no more than 30 cases per 100,000.

Primary and Secondary Syphillis Rates* Louisiana, Neighboring States, and United States, 1995-1999					
State	1995	1996	1997	1998	1999
Alabama	14.4	12.4	9.6	6.3	4.6
Arkansas	19.9	10.5	6.9	4.3	3.4
Louisiana	24.0	12.3	8.4	9.9	7
Mississippi	72.4	30.4	14.4	9.6	7
Texas	8.3	4.8	3.5	2.3	2.4
United States	6.3	4.3	3.2	2.6	2.5

*Rate per 100,000 population

Sources: Louisiana Office of Public Health, STD Control Program 2000
CDC STD Surveillance Report 1999

Gonorrhea

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and they include genital, anorectal, and pharyngeal infections.

Louisiana had the 8th highest rate of gonorrhea nationwide in 1996. In 1997, Louisiana moved to the 5th highest, then to the 4th highest in 1998, and to the 3th highest in 1999. The total number of cases of gonorrhea had been consistently declining, from 10,816 cases in 1995 to 10,761 cases in 1997, in 1998 the number rose to 12,543, mainly due to improved laboratory reporting, in 1999, the total number was 13,198, and in 2000, the total number of cases was 13,265. In 1999, 50% of the cases of gonorrhea occurred in females; 86% of cases occurred in African-Americans; 32% of the cases occurred among teens 15-19 year old, and 34% of the cases of gonorrhea occurred among 20-24 year olds.

Gonorrhea Rates* by Sex and Race Louisiana, 1995-1999									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	18	29	23	940	564	740	37	41	39
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	19	35	28	958	757	851	49	124	88
1999	25	48	37	966	792	874	41	63	52

*Rate per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate of gonorrhea for 1999 was 313 per 100,000 population (Census 1990), and the national rate for 1999 was 133.2. *The Healthy People 2000 Review 1997* objective for gonorrhea, is to reduce the rate to: a) an incidence of no more than 100 cases per 100,000 people; b) an incidence of no more than 650 cases per 100,000 among African-Americans; c) an incidence of no more than 375 per 100,000 persons age 15-19, and d) an incidence of no more than 175 per 100,000 persons age 15-44.

Gonorrhea Rates* Louisiana, Neighboring States, and United States, 1995-1999					
State	1995	1996	1997	1998	1999
Alabama	345	310	282	295	250
Arkansas	227	204	175	157	127
Louisiana	214	215	249	287	302
Mississippi	353	250	307	392	378
Texas	165	124	139	169	167
United States	149	124	123	133	133

*Rate per 100,000 population

Sources: Louisiana Office of Public Health, STD Control Program 2000
CDC STD Surveillance Report 1999

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy for these infections is commonly based on the clinical syndrome, or as simultaneous treatment for gonorrhea.

Louisiana had the 11th highest rate of chlamydia nationwide in 1995. In 1996, Louisiana rose to the 4th highest rate, and then dropped to the 7th highest in 1997. In 1998 Louisiana had the 5th highest rate. The total number of cases of chlamydia had been declining, from 11,079 cases in 1993 to 10,727 cases in 1995, but went slightly up to 10,991 in 1996, to 11,512 in 1997, rose to 15,305 in 1998, to 16,573 in 1999, and to 17,921 in 2000. In 1999, 79% of chlamydia cases occurred in females; 74% of cases occurred in African-Americans; 42% of cases among 15-19 year-olds, and 36% of the chlamydia cases occurred among 20-24 year-olds.

The Louisiana chlamydia rate for 1999 was 349 per 100,000 population (Census 1990), and the national rate for 1999 was 254.1. *The Healthy People 2000 Review 1997* objective for

chlamydia trachomatis infections is to reduce the prevalence in women under 25 years of age to no more than 5% (as measured by a decrease in the prevalence of chlamydia infection among family planning clients).

Chlamydia Rates* by Sex and Race
Louisiana, 1995-1999

	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	12	102	58	251	1011	657	37	176	106
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	25	125	76	411	1360	919	71	278	174
1999	30	141	87	448	1369	941	24	198	111

*Rate per 100,000 population 1990
Source: Louisiana Office of Public Health, STD Control Program

Chlamydia Rates*
Louisiana, Neighboring States, and United States, 1995-1999

State	1995	1996	1997	1998	1999
Alabama	75	195	204	233	284
Arkansas	32	27	85	163	231
Louisiana	254	260	363	349	381
Mississippi	34	161	291	389	420
Texas	238	230	265	311	319
United States	190.4	194.5	207.0	236.6	254

*Rate per 100,000 population
Sources: Louisiana Office of Public Health, STD Control Program 2000
CDC STD Surveillance Report 1999

Sexually Transmitted Disease Rates* by Parish
Louisiana, 2000

Parish	Early Syphilis (Primary, Secondary, and Early Latent)	Gonorrhea	Chlamydia
State Total	17.0	313.0	393.0
Acadia	34.0	128.8	202.2
Allen	4.7	66.0	207.3
Ascension	13.7	171.8	271.4
Assumption	0.0	180.2	356.0
Avoyelles	2.6	94.5	168.5
Beauregard	13.3	83.1	222.7
Bienville	0.0	256.6	638.3
Bossier	2.3	325.2	442.6
Caddo	0.8	823.0	916.4
Calcasieu	21.4	225.4	322.4
Caldwell	0.0	152.9	387.4
Cameron	0.0	75.6	140.4
Catahoula	0.0	117.5	235.0
Claiborne	0.0	287.3	425.2
Concordia	4.8	134.4	312.1
DeSoto	0.0	512.9	690.4
East Baton Rouge	18.4	448.3	457.0

*Rate per 100,000 population 1990

Sexually Transmitted Disease Rates* by Parish Louisiana, 2000			
Parish	Early Syphilis (Primary, Secondary, and Early Latent)	Gonorrhea	Chlamydia
East Carroll	10.3	484.1	813.7
East Feliciana	5.2	177.0	348.8
Evangeline	9.0	111.2	249.4
Franklin	4.5	165.3	299.3
Grant	0.0	22.8	131.2
Iberia	77.6	358.7	544.7
Iberville	6.4	222.2	473.4
Jackson	6.4	108.2	299.3
Jefferson	1.3	147.4	225.7
Jefferson Davis	16.3	107.4	358.0
Lafayette	20.6	197.9	349.6
Lafourche	17.5	158.4	266.7
LaSalle	0.0	29.3	65.9
Lincoln	4.8	328.2	541.4
Livingston	1.4	85.1	150.3
Madison	0.0	329.0	706.0
Morehouse	6.0	523.0	539.0
Natchitoches	8.0	559.0	801.0
Orleans	23.0	566.0	769.0
Ouachita	4.0	525.0	562.0
Plaquemines	8.0	78.0	102.0
Pointe Coupee	53.0	169.0	315.0
Rapides	4.0	259.0	401.0
Red River	21.0	586.0	1097.0
Richland	5.0	271.0	475.0
Sabine	0.0	199.0	358.0
St. Bernard	3.0	47.0	122.0
St. Charles	12.0	94.0	191.0
St. Helena	0.0	243.0	425.0
St. James	10.0	192.0	421.0
St. John	20.0	275.0	470.0
St. Landry	9.0	344.0	336.0
St. Martin	0.0	171.0	246.0
St. Mary	14.0	210.0	293.0
St. Tammany	10.0	119.0	107.0
Tangipahoa	19.0	511.0	614.0
Tensas	0.0	267.0	338.0
Terrebonne	38.0	288.0	364.0
Union	0.0	280.0	319.0
Vermilion	0.0	118.0	104.0
Vernon	6.0	97.0	242.0
Washington	16.0	340.0	245.0
Webster	0.0	269.0	433.0
West Baton Rouge	15.0	113.0	129.0
West Carroll	0.0	41.0	149.0
West Feliciana	8.0	77.0	163.0
Winn	6.0	68.0	123.0

*Rate per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

D. HIV/AIDS

Background

AIDS (Acquired Immunodeficiency Syndrome) is caused by the *human immunodeficiency virus*, or HIV. People infected with HIV can develop many health problems, including extreme weight loss, severe pneumonia, forms of cancer, and damage to the nervous system. These illnesses signal the onset of AIDS. The time at which symptoms first begin to appear varies from person to person. In some people these illnesses may develop within a year or two, others may stay healthy for 10 years of more. Although recent advances in treatment have significantly slowed the progression from HIV to AIDS and AIDS to death, there is still no cure for AIDS. This means that the most effective way to curb the HIV/AIDS epidemic is through the provision of HIV prevention interventions, and improved access to treatment and other services for HIV-infected persons.

The epidemic continues to greatly impact public health in Louisiana and will make growing demands on health and social service systems for many decades. The lifetime medical cost of caring for a person with AIDS is over $100,000, most of which is paid by the government. Each year, new infections obligate Louisiana to approximately $120 million in future medical costs.

Summary

- As of December 31, 1999, there were 12,090 persons reported to be living with HIV/AIDS in Louisiana. In 1999, 854 new AIDS cases were diagnosed and 1,249 new HIV cases were detected and reported.
- During 1999, 75% of newly-detected HIV/AIDS cases and 74% of newly-diagnosed AIDS cases were in African-Americans. The HIV detection rates for African-Americans remain disproportionately high; they are over six times higher than among whites.
- Overall, it is estimated that the numbers of new infections each year are now similar among men who have sex with men (MSM), injection drug users, and high-risk heterosexuals. For African- Americans, high-risk heterosexual activity has become the leading exposure category; and among whites, the predominant exposure is MSM.
- AIDS-related mortality began to decline dramatically in 1996, coinciding with the emergence of more effective treatments; however, the number of AIDS-related deaths appears to be stabilizing.
- The transmission of HIV from mothers to their infants has dropped dramatically in Louisiana, from over 25% in 1993 to 5% in 1998.

1999 Status

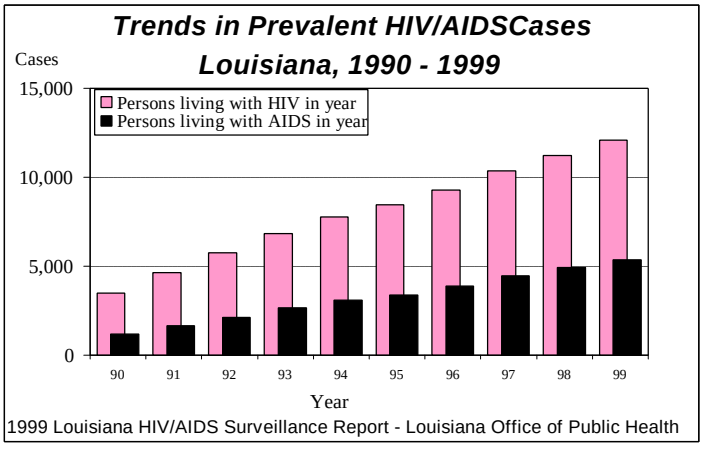
Louisiana's rank decreased from 7th highest in 1998 to 10th highest in 1999 among states with the highest AIDS rates. However, the HIV/AIDS case rate continued to be higher in Louisiana than in neighboring states.

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 1997-1999									
	1997		1998		1999		Cumulative Totals		
State	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Adults	Children less than 13	Total
Alabama	568	13.1	484	11.1	476	10.9	5,724	68	5,792
Arkansas	242	9.6	203	8	194	7.6	2,745	38	2,783
Louisiana	1,090	25	951	21.8	854	19.5	11,851	119	11,970
Mississippi	345	12.6	415	15.1	421	15.2	3,981	56	4,037
Texas	4,672	24.1	3,967	20.1	3,181	15.9	51,079	370	51,449
United States	60,270	22.1	48,269	17.6	46,400	16.7	724,656	8,718	733,374

Source: Louisiana Office of Public Health, HIV/AIDS Program

For the first time, in 1999 the Baton Rouge region surpassed the New Orleans region in the number of AIDS cases diagnosed per population. Among large cities in the nation, the AIDS case rate for metro Baton Rouge ranked 12th highest; the metro New Orleans AIDS case rate was 14th. Among the 31 states with HIV reporting, Louisiana had the 5th highest number of newly detected HIV cases in 1999 and the 5th highest number of persons living with HIV infection.

Persons Living with HIV/AIDS



New highly active antiretroviral therapies (HAART), which have been shown to be effective in the treatment of HIV infection, have altered the natural history of HIV infection. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death among many people infected with HIV. For this reason, AIDS surveillance data no longer accurately represent current trends in HIV transmission. AIDS surveillance data now reflect differences in access to treatment and the potential failure of certain treatment regimens.

Due to the widespread use of new HIV treatments, there has been a recent reduction in morbidity and mortality among HIV-infected persons. Compared to 1996 statistics, in 1999, deaths in men have decreased by 49%, deaths in women by 35%, in African-Americans 39%, and in whites 57%. Although all groups have experienced a significant decrease in mortality, the African-American population and women have experienced a smaller decline in deaths than the white and male populations respectively. These statistics suggest that recent advances

have been less effective at the population level in African-Americans and in women, possibly because these groups have disproportionate access to treatments.

The decline in morbidity and mortality has led to an increase in the number of persons living with HIV/AIDS. As of December 1999, a total of 12,090 persons in Louisiana were known to be living with HIV/AIDS, including 202 cases in children under 15. These numbers reflect only those persons who were confidentially tested and whose case was reported to the Health Department. Thus, these numbers certainly underestimate the total number of persons infected with HIV in Louisiana and should be considered minimum estimates. As the number of persons living with HIV continues to increase, more resources will need to be directed toward programs and services that address prevention, early detection, and effective treatment.

Currently, HIV impacts every parish in Louisiana. The HIV/AIDS Program has funded community-based organizations in every region of the state to deliver HIV prevention programs to persons at high risk and to provide services for persons with HIV/AIDS.

Persons Living with HIV/AIDS by Parish
Louisiana, December 1999

Parish	Persons Living with HIV/AIDS	Parish	Persons Living with HIV/AIDS
Statewide	**12,090**	**Region VI**	**505**
		Avoyelles	127
Region I	**5565**	Catahoula	9
Jefferson	980	Concordia	16
Orleans	4483	Grant	11
Plaquemines	21	La Salle	5
St.Bernard	81	Rapides	243
		Vernon	45
Region II	**2514**	Winn	49
Ascension	74		
East Baton Rouge	1955	**Region VII**	**803**
East Feliciana	91	Bienville	11
Iberville	174	Bossier	96
Pointe Coupee	32	Caddo	524
West Baton Rouge	70	Claiborne	56
West Feliciana	118	De Soto	18
		Natchitoches	45
Region III	**366**	Red River	6
Assumption	19	Sabine	16
Lafourche	58	Webster	31
St.Charles	50		
St.James	35	**Region VIII**	**514**
St.John the Baptist	43	Caldwell	7
St.Mary	52	East Carroll	12
Terrebonne	109	Franklin	12
		Jackson	6
Region IV	**721**	Lincoln	36
Acadia	49	Madison	32
Evangeline	24	Morehouse	34
Iberia	61	Ouachita	298
Lafayette	380	Richland	37
St.Landry	112	Tensas	14
St.Martin	45	Union	18
Vermilion	50	West Carroll	8
Region V	**591**	**Region IX**	**508**
Allen	131	Livingston	71
Beauregard	49	St.Helena	5
Calcasieu	372	St.Tammany	189
Cameron	4	Tangipahoa	116
Jefferson Davis	35	Washington	127
		Unknown	3

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Shifts in the Epidemic

In keeping with national trends, over the last decade Louisiana has seen a shift in the HIV/AIDS epidemic towards women, minorities, adolescents, high-risk heterosexuals, intravenous drug users and rural communities. HIV/AIDS has been steadily on the rise in the heterosexual population. The percentage of persons living with HIV/AIDS, who likely contracted their infection through high-risk heterosexual contact, increased from 7% in 1990 to an estimated 19% in 1999. Additionally, the percentage of persons living with HIV/AIDS, who likely contracted their infection through injection drug use, has also increased from 15% in 1990 to 24% in 1999. Although the majority of all cases continue to be in men who have sex with men, the proportion of cases attributable to high-risk heterosexual contact and injection drug use is increasing.

African-Americans continue to be disproportionately impacted by HIV/AIDS. In 1999, 75% of newly detected HIV/AIDS cases were in African-Americans, while African-Americans comprise only 31% of the population. The HIV detection rates for African-Americans are over six times higher than those among whites and three times higher than those among Hispanics.

The percentage of newly detected HIV/AIDS cases reported among women in Louisiana steadily has been increasing. In 1993, 21% of all cases were women, and in 1999, 30% of all new cases detected were women. African-American women accounted for 85% of all new HIV/AIDS cases in women detected in 1999.

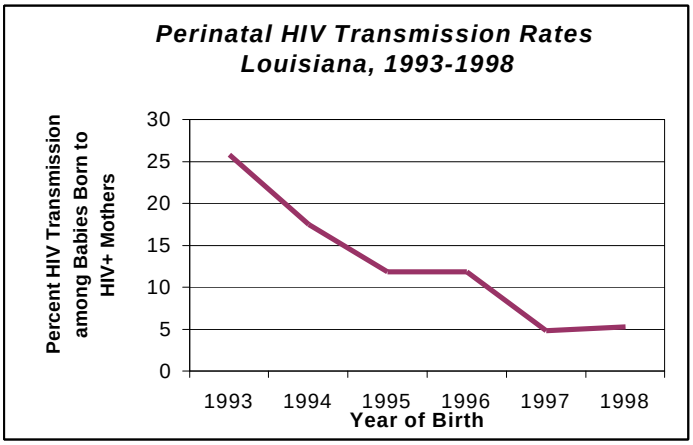
Persons Living with HIV/AIDS, by Demographics and Exposure Group
Louisiana, 1994-1999

	1994	*1995*	*1996*	*1997*	*1998*	*1999*
Total Living Cases	7,760	8,445	9,297	10,368	11,237	12,090
Gender						
Male	80%	78%	76%	75%	74%	74%
Female	20%	22%	24%	25%	26%	26%
Ethnicity						
African-American	56%	58%	60%	61%	63%	64%
White	41%	39%	37%	36%	34%	33%
Other	3%	3%	3%	3%	3%	3%
Unknown	<1%	<1%	<1%	<1%	<1%	<1%
Exposure Group						
Cases with Specified Risk	6,488	6,839	7,224	7,731	8,109	8,267
MSM*	59%	56%	54%	53%	53%	53%
IDU*	23%	24%	25%	25%	25%	24%
HRH*	14%	16%	17%	18%	19%	19%
Transf/Hemo*	2%	2%	2%	2%	2%	2%
Perinatal	1%	2%	2%	2%	2%	2%

* MSM: Men who have Sex with Men; IDU: Injection Drug Users (non-MSM); HRH: High Risk Heterosexual; Transf/Hemo: Transfusion/Transplant/Hemophiliac

Source: Louisiana Office of Public Health, HIV/AIDS Program

Despite the increasing number of women infected with HIV, the number of pediatric HIV/AIDS cases (children diagnosed when younger than thirteen years of age) has been decreasing in recent years. Perinatal transmission rates have dropped dramatically from over 25% in 1993 to 5% in 1998. This decline is credited to improved treatment protocols for HIV-infected pregnant women and increased use of antiretroviral therapy during pregnancy and delivery. The HIV/AIDS Program's Perinatal Prevention program continues to work with medical centers and providers around the state to reinforce the importance of universally offering HIV counseling and testing to all pregnant women, and early diagnosis and treatment for HIV-infected pregnant women.



Source: Louisiana Office of Public Health, HIV/AIDS Program

E. CANCER

1994-1998 Status

According to the American Cancer Society, one in every four deaths in the United States is attributable to cancer. More people are surviving cancer now than ever before, but this trend is not true for all groups. Survival rates can vary according to race.

Due to the possibility of natural fluctuations in cancer incidence during the course of a year, disease counts and rates have been combined to encompass a five-year period. This allows a more reliable identification of the cancers that are of most concern in our state.

Five Most Common Cancers Louisiana, 1994-1998 (Five-Year Case Count)	
Type	***Number of Cases***
All Cancers	92,996
Lung	16,099
Prostate	14,156
Breast	13,079
Colon & Rectum	10,983
Bladder	3,589

Source: Louisiana Tumor Registry

The risk for many cancers can be significantly reduced by practicing preventive measures. The National Cancer Institute estimates that tobacco accounts for 30% of cancers, and dietary factors account for another 35%. For example, most of the lung cancers can be prevented by not smoking, and diets low in fat and high in fiber may help prevent colon, rectal, breast, prostate and other cancers.

Both preventive measures and early detection are important in lowering cancer death rates. Mammography, clinical breast examination, Pap tests, fecal occult blood tests and proctosigmoidoscopy (colon exam with lighted scope) make it possible to detect and treat cancers in their early stages and prevent spreading. However, despite modern technology and knowledge, a significant portion of the population at risk for various cancers fails to participate in screening procedures.[2]

Cancer is not just one, but many, diseases and is associated with a variety of risk factors. Since 1950, overall cancer mortality rates have changed little, but there have been significant changes in mortality for some age groups and cancers. Several prevalent forms of cancer can be either prevented or – in the case of breast or prostate cancer – diagnosed early enough to prevent the spread to other organs.

[2] *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.

Five Most Common Cancers In Louisiana Males, 1994-1998					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	479.3	All Cancers	555.8	All Cancers	49,812
Prostate	131.0	Prostate	184.0	Prostate	14,156
Lung	95.2	Lung	123.5	Lung	10,096
Colon & Rectum	55.8	Colon & Rectum	55.8	Colon & Rectum	5,610
Bladder	29.5	Stomach	19.3	Bladder	2,610
Non-Hodgkin's Lymphoma	18.6	Oral Cavity & Pharynx	17.1	Non-Hodgkin's Lymphoma	1,759

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population

Source: Louisiana Tumor Registry

Five Most Common Cancers In Louisiana Females, 1994-1998					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	324.0	All Cancers	310.6	All Cancers	43,183
Breast	101.0	Breast	89.7	Breast	12,927
Lung	47.6	Colon & Rectum	41.3	Lung	6,003
Colon & Rectum	36.3	Lung	39.0	Colon & Rectum	5,373
Corpus Uteri	14.5	Cervix Uteri	15.6	Corpus Uteri	1,837
Non-Hodgkin's Lymphoma	13.3	Corpus Uteri	13.3	Non-Hodgkin's Lymphoma	1,649

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population

Source: Louisiana Tumor Registry

Background[3]

Breast cancer is the most frequently occurring invasive cancer among women in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer decreased 8% between 1987-91 and 1993-97. Certain factors—such as family history, exposure to hormones, reproduction issues, and excessive alcohol use—can influence the risk for breast cancer. The association between high-fat diets and increased breast cancer risk has not been firmly established. It has recently been discovered that alterations in two genes can account for most inherited breast cancer, which constitutes 5-10% of all breast cancers. Early detection improves the chances of survival, and the National Cancer Institute recommended in 1997 that women in their forties or older get screening mammograms on a regular basis, every 1 to 2 years. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms and how often to be screened.

[3] From National Cancer Institute (NCI) and American Cancer Society resources and publications. Statistics quoted pertain to the United States.

Cervical cancer (cervix uteri) afflicts 13,000 women each year. Increased use of the Pap test has contributed to an almost 50 percent drop in cervical cancer deaths since 1973. Women who are or have been sexually active, or have reached age 18, should have Pap tests and physical exams regularly.

Colorectal cancer was the second leading cause of cancer death, third among men and third in women, in 1993-97. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables and fiber and low in fat appears to reduce the risk of colorectal cancer. Exercise may also lower risk for this cancer. Although there is no general agreement that screening for colon cancer definitely reduces mortality, annual fecal occult blood tests have proved useful in identifying people who should have further tests to rule out colon cancer and other diseases, especially for those over 50. The potential benefit of regular sigmoidoscopies is currently being investigated by the NCI.

Kidney cancer accounted for approximately 2% of all new 1993-97 cancers in the U.S. Renal cell cancer and renal pelvis cancer accounted for 92% and 8% of kidney cases respectively. While abuse of analgesics has been causally linked to increased risk, and beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors, a consistent risk factor has been obesity. Perhaps the best-known factor is cigarette smoking. Given the present knowledge about cancers of the kidney, prevention is best achieved by cessation of cigarette smoking. About one third of renal cell cancers and more than one half of renal pelvis and ureter cancers could be avoided by eliminating the use of tobacco.

Leukemias together accounted for 2.5% of the total 1993-97 cancer incidence in the U.S. and about one third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among Caucasians than African Americans.

Lung cancer is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat, and in 1993-97 caused approximately 30% of all cancer deaths. Smoking is responsible for 85% of lung cancers. The risk of dying of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Unfortunately, smoking rates have begun to rise in children for the last several years.

Melanoma of the skin incidence has increased dramatically over the last several decades. It represented only about 5% of all 1993-97 skin cancers in the U.S. but was responsible for about 75% of all skin cancer deaths. Survival rates have been increasing because of earlier diagnoses, but the total mortality rate continues to rise gradually with the increase in incidence.

Non-Hodgkin's lymphoma cases have been increasing continuously but inexplicably over the past several decades, but the rate of increase apparently slowed in the 1990s. Part of this increase is due to AIDS-related cases. The cofactors that predispose AIDS cases to lymphoma need elucidation, and research is needed into other possible causes, such as hair-coloring products, pesticides, nitrates, solvents, other industrial chemicals, and viruses other than HIV.

Oral cavity & pharynx cancer accounted for approximately 2.5% of all malignancies in 1993-97. In Americans, oral cancer is 2-3 times more common among males than females. Tobacco and alcohol account for approximately three fourths of all oral cancers in the U.S. Epidemiologic evidence indicates that smoking and drinking are independent risk factors that produce a synergistic effect when combined. Use of snuff is a primary cause of cancers of the gum and cheek. Although not as prevalent, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as that for cigarette smoking.

Ovarian cancer strikes over 11,000 women every year. Currently, the five-year survival rate is approximately 50%. The NCI is conducting a study to determine whether screening can detect the cancer early enough to reduce mortality.

Pancreatic cancer is a 'silent' disease that is asymptomatic until well advanced. Survival is poor; only about 4% of patients are alive five years after diagnosis. In 1993-97 it ranked 11th of all cancers in the U.S. for incidence but was fourth for cancer mortality. Little is known about the etiology, and the only established risk factor is cigarette smoking.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. There is increasing evidence that diet plays an important role in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The NCI is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) is beneficial.

Urinary bladder cancer was the fifth most common of all 1993-97 cancers in the United States, where it is chiefly a disease of white men over 65. The most important known risk factor is cigarette smoking; smokers demonstrate a 2-3 fold increased risk over non-smokers. Workers who are exposed to benzidine and 2-naphthylamine are believed to be at an elevated risk for bladder cancer due to the potent carcinogenicity of these two chemicals. Artificial sweeteners do not appear to increase risk, and coffee drinking appears to have little or no effect.

Uterine cancer (corpus uteri), the fourth most common cancer in U.S. women, accounted for approximately 6% of all 1993-97 cases. However, a limited number of deaths results from this disease, as reflected in a high five-year survival rate of 88%.

Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	*Total*		*Males*		*Females*	
LOUISIANA	All Cancers	92,996	All Cancers	49,813	All Cancers	43,183
	Lung	16,099	Prostate	14,156	Breast	12,927
	Prostate	14,156	Lung	10,096	Lung	6,003
	Breast	13,079	Colon & Rectum	5,610	Colon & Rectum	5,373
	Colon & Rectum	10,983	Bladder	2,610	Corpus Uteri	1,837
	Bladder	3,589	Non-Hodgkin's Lymphoma	1,759	Non-Hodgkin's Lymphoma	1,649
Region 1	All Cancers	23,115	All Cancers	11,905	All Cancers	11,210
	Lung	3,936	Prostate	3,175	Breast	3,415
	Breast	3,454	Lung	2,319	Lung	1,617
	Prostate	3,175	Colon & Rectum	1,347	Colon & Rectum	1,414
	Colon & Rectum	2,761	Bladder	690	Corpus Uteri	456
	Bladder	952	Non-Hodgkin's Lymphoma	487	Non-Hodgkin's Lymphoma	403
Jefferson	All Cancers	9,978	All Cancers	5,136	All Cancers	4,842
	Lung	1,682	Prostate	1,371	Breast	1,488
	Breast	1,502	Lung	973	Lung	709
	Prostate	1,371	Colon & Rectum	586	Colon & Rectum	571
	Colon & Rectum	1,157	Bladder	340	Corpus Uteri	200
	Bladder	448	Non-Hodgkin's Lymphoma	230	Non-Hodgkin's Lymphoma	196
Orleans	All Cancers	11,010	All Cancers	5,658	All Cancers	5,352
	Lung	1,819	Prostate	1,550	Breast	1,661
	Breast	1,681	Lung	1,091	Lung	728
	Prostate	1,550	Colon & Rectum	625	Colon & Rectum	714
	Colon & Rectum	1,339	Bladder	284	Corpus Uteri	214
	Bladder	408	Non-Hodgkin's Lymphoma	206	Cervix Uteri	198
Plaquemines	All Cancers	468	All Cancers	257	All Cancers	211
	Lung	96	Lung	63	Breast	59
	Breast	61	Prostate	59	Lung	33
	Prostate	59	Colon & Rectum	21	Colon & Rectum	19
	Colon & Rectum	40	Oral Cavity & Pharynx / Bladder	16 *	Bladder / Corpus Uteri	8 *
	Bladder	24	Non-Hodgkin's Lymphoma	11	Stomach / Ovary / Cervix Uteri / Non-Hodgkin's Lymphoma	7 *

* Number of cases is the same at each site.

** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
St. Bernard	All Cancers	1,659	All Cancers	854	All Cancers	805
	Lung	339	Prostate	195	Breast	207
	Colon & Rectum	225	Lung	192	Lung	147
	Breast	210	Colon & Rectum	115	Colon & Rectum	110
	Prostate	195	Bladder	50	Non-Hodgkin's Lymphoma / Corpus Uteri	34 *
	Non-Hodgkin's Lymphoma	74	Non-Hodgkin's Lymphoma	40	Ovary	26
Region 2	All Cancers	11,531	All Cancers	6,373	All Cancers	5.158
	Prostate	2,160	Prostate	2,160	Breast	1,671
	Lung	1,734	Lung	1,097	Lung	637
	Breast	1,697	Colon & Rectum	715	Colon & Rectum	634
	Colon & Rectum	1,349	Bladder	337	Corpus Uteri	225
	Bladder	455	Kidney & Renal Pelvis	207	Non-Hodgkin's Lymphoma	197
Ascension	All Cancers	1,146	All Cancers	630	All Cancers	516
	Prostate	216	Prostate	216	Breast	165
	Lung	188	Lung	120	Lung	68
	Breast	168	Colon & Rectum	62	Colon & Rectum	60
	Colon & Rectum	122	Bladder	32	Ovary	23
	Bladder	42	Kidney & Renal Pelvis	28	Non-Hodgkin's Lymphoma	18
East Baton Rouge	All Cancers	7,875	All Cancers	4,276	All Cancers	3,599
	Prostate	1,502	Prostate	1,502	Breast	1,193
	Breast	1,211	Lung	710	lung	448
	Lung	1,158	Colon & Rectum	477	Colon & Rectum	439
	Colon & Rectum	916	Bladder	235	Corpus Uteri	159
	Bladder	319	Kidney & Renal Pelvis	138	Non-Hodgkin's Lymphoma	145
East Feliciana	All Cancers	523	All Cancers	312	All Cancers	211
	Prostate	95	Prostate	95	Breast	71
	Lung	82	Lung	65	Colon & Rectum	25
	Breast	72	Colon & Rectum	40	Lung	17
	Colon & Rectum	65	Bladder	14	Corpus Uteri	14
	Bladder	20	Oral Cavity & Pharynx	13	Thyroid / Non-Hodgkin's Lymphoma	8 *

* Number of cases is the same at each site.

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Iberville	All Cancers	736	All Cancers	419	All Cancers	317
	Prostate	131	Prostate	131	Breast	88
	Lung	114	Lung	70	Lung	44
	Breast	88	Colon & Rectum	42	Colon & Rectum	38
	Colon & Rectum	80	Bladder	25	Cervix Uteri	17
	Bladder	30	Kidney & Renal Pelvis	16	Ovary	15
Pointe Coupee	All Cancers	542	All Cancers	325	All Cancers	217
	Prostate	92	Prostate	92	Breast	59
	Colon & Rectum	91	Lung	56	Colon & Rectum	45
	Lung	81	Colon & Rectum	46	Lung	25
	Breast	60	Bladder	15	Corpus Uteri	10
	Bladder	20	Esophagus	13	Pancreas	8
West Baton Rouge	All Cancers	476	All Cancers	260	All Cancers	216
	Prostate	83	Prostate	83	Breast	73
	Breast	74	Lung	39	Lung	23
	Lung	62	Colon & Rectum	35	Colon & Rectum	21
	Colon & Rectum	56	Bladder	12	Ovary	14
	Non-Hodgkin's Lymphoma	20	Pancreas / Non-Hodgkin's Lymphoma	11 *	Corpus Uteri	11
West Feliciana	All Cancers	233	All Cancers	151	All Cancers	82
	Lung	49	Prostate	41	Breast	22
	Prostate	41	Lung	37	Lung	12
	Breast	24	Colon & Rectum	13	Colon & Rectum / Cervix Uteri	6 *
	Colon & Rectum	19	Oral Cavity & Pharynx	7	Corpus Uteri / Non-Hodgkin's Lymphoma / Brain	**
	Non-Hodgkin's Lymphoma	8	Kidney & Renal Pelvis	**	Bladder / Ovary	**
Region 3	All Cancers	6,731	All Cancers	3,725	All Cancers	3,006
	Lung	1,197	Prostate	937	Breast	931
	Breast	941	Lung	811	Lung	386
	Prostate	937	Colon & Rectum	459	Colon & Rectum	383
	Colon & Rectum	842	Bladder	209	Non-Hodgkin's Lymphoma	123
	Bladder	283	Non-Hodgkin's Lymphoma	144	Corpus Uteri	122

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Assumption	All Cancers	411	All Cancers	236	All Cancers	175
	Prostate	68	Prostate	68	Breast	63
	Lung / Breast	64 *	Lung	53	Colon & Rectum	21
	Colon & Rectum	49	Colon & Rectum	28	Lung	11
	Bladder	19	Bladder	15	Cervix Uteri	8
	Non-Hodgkin's Lymphoma	12	Leukemias	9	Non-Hodgkin's Lymphoma	6
Lafourche	All Cancers	1,541	All Cancers	825	All Cancers	716
	Lung	276	Prostate	208	Breast	216
	Breast	219	Lung	180	Colon & Rectum	97
	Prostate	208	Colon & Rectum	108	Lung	96
	Colon & Rectum	205	Bladder	46	Non-Hodgkin's Lymphoma	37
	Non-Hodgkin's Lymphoma	66	Non-Hodgkin's Lymphoma	29	Corpus Uteri	30
St. Charles	All Cancers	804	All Cancers	440	All Cancers	364
	Prostate	130	Prostate	130	Breast	117
	Lung	122	Lung	72	Lung	50
	Breast	118	Colon & Rectum	56	Colon & Rectum	49
	Colon & Rectum	105	Bladder	22	Ovary / Corpus Uteri	15 *
	Non-Hodgkin's Lymphoma	30	Non-Hodgkin's Lymphoma	18	Thyroid / Non-Hodgkin's Lymphoma	12 *
St. James	All Cancers	430	All Cancers	242	All Cancers	188
	Lung	69	Prostate	66	Breast	63
	Prostate	66	Lung	51	Colon & Rectum	24
	Breast	63	Colon & Rectum	26	Lung	18
	Colon & Rectum	50	Kidney & Renal Pelvis	12	Kidney & Renal Pelvis	11
	Kidney & Renal Pelvis	23	Pancreas / Oral Cavity & Pharynx / Bladder	9 *	Corpus Uteri	8
St. John	All Cancers	668	All Cancers	357	All Cancers	311
	Lung	117	Prostate	109	Breast	101
	Prostate	109	Lung	72	Lung	45
	Breast	103	Colon & Rectum	34	Colon & Rectum	33
	Colon & Rectum	67	Bladder	21	Cervix Uteri	16
	Bladder	30	Kidney & Renal Pelvis	14	Non-Hodgkin's Lymphoma	14

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
St. Mary	All Cancers	1,124	All Cancers	648	All Cancers	476
	Lung	191	Prostate	170	Breast	141
	Prostate	170	Lung	127	Lung	64
	Breast	143	Colon & Rectum	68	Colon & Rectum	60
	Colon & Rectum	128	Bladder	45	Corpus Uteri	20
	Bladder	58	Non-Hodgkin's Lymphoma	25	Ovary	17
Terrebonne	All Cancers	1,753	All Cancers	977	All Cancers	776
	Lung	358	Lung	256	Breast	230
	Colon & Rectum	238	Prostate	186	Lung	102
	Breast	231	Colon & Rectum	139	Colon & Rectum	99
	Prostate	186	Bladder / Non-Hodgkin's Lymphoma	51 *	Corpus Uteri	37
	Non-Hodgkin's Lymphoma	86	Kidney & Renal Pelvis	36	Non-Hodgkin's Lymphoma	35
Region 4	All Cancers	11,271	All Cancers	5,964	All Cancers	5,307
	Lung	2,071	Prostate	1,472	Breast	1,595
	Breast	1,614	Lung	1,295	Lung	776
	Prostate	1,472	Colon & Rectum	722	Colon & Rectum	587
	Colon & Rectum	1,309	Bladder	270	Corpus Uteri	210
	Non-Hodgkin's Lymphoma	408	Non-Hodgkin's Lymphoma	208	Non-Hodgkin's Lymphoma	200
Acadia	All Cancers	1,435	All Cancers	782	All Cancers	653
	Lung	254	Prostate	206	Breast	197
	Prostate	206	Lung	151	Lung	103
	Breast	200	Colon & Rectum	117	Colon & Rectum	80
	Colon & Rectum	197	Bladder	33	Corpus Uteri / Leukemias	25 *
	Bladder / Non-Hodgkin's Lymphoma	47 *	Non-Hodgkin's Lymphoma	25	Pancreas / Non-Hodgkin's Lymphoma	22 *
Evangeline	All Cancers	748	All Cancers	374	All Cancers	374
	Lung	152	Lung	92	Breast	87
	Colon & Rectum	98	Prostate	83	Lung	60
	Breast	87	Colon & Rectum	49	Colon & Rectum	49
	Prostate	83	Oral Cavity & Pharynx / Bladder	16 *	Pancreas	20
	Pancreas	34	Pancreas / Kidney & Renal Pelvis	14 *	Non-Hodgkin's Lymphoma	15

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Iberia	All Cancers	1,593	All Cancers	848	All Cancers	745
	Lung	295	Prostate	234	Breast	228
	Prostate	234	Lung	181	Lung	114
	Breast	230	Colon & Rectum	105	Colon & Rectum	76
	Colon & Rectum	181	Oral Cavity & Pharynx	33	Corpus Uteri	36
	Kidney & Renal Pelvis	56	Kidney & Renal Pelvis	32	Pancreas	33
Lafayette	All Cancers	3,347	All Cancers	1,705	All Cancers	1,642
	Lung	565	Prostate	365	Breast	545
	Beast	549	Lung	362	Lung	203
	Prostate	365	Colon & Rectum	202	Colon & Rectum	158
	Colon & Rectum	360	Bladder	83	Non-Hodgkin's Lymphoma	75
	Non-Hodgkin's Lymphoma	151	Non-Hodgkin's Lymphoma	76	Ovary	64
St. Landry	All Cancers	2,003	All Cancers	1,078	All Cancers	925
	Lung	380	Prostate	277	Breast	264
	Prostate	277	Lung	240	Lung	140
	Breast	271	Colon & Rectum	114	Colon & Rectum	112
	Colon & Rectum	226	Bladder	63	Pancreas	43
	Bladder	86	Pancreas	37	Corpus Uteri	35
St. Martin	All Cancers	886	All Cancers	492	All Cancers	394
	Lung	192	Lung	125	Breast	107
	Prostate	118	Prostate	118	Lung	67
	Colon & Rectum	116	Colon & Rectum	68	Colon & Rectum	48
	Breast	107	Bladder	20	Corpus Uteri	18
	Oral Cavity & Pharynx / Bladder	27 *	Pancreas	19	Cervix Uteri	17
Vermilion	All Cancers	1,259	All Cancers	685	All Cancers	574
	Lung	233	Prostate	189	Breast	167
	Prostate	189	Lung	144	Lung	89
	Breast	170	Colon & Rectum	67	Colon & Rectum	64
	Colon & Rectum	131	Bladder	30	Skin Melanomas	25
	Non-Hodgkin's Lymphoma	46	Kidney & Renal Pelvis	25	Corpus Uteri	23

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Region 5	All Cancers	5,906	All Cancers	3,204	All Cancers	2,702
	Lung	1,078	Prostate	860	Breast	737
	Prostate	860	Lung	667	Lung	411
	Breast	742	Colon & Rectum	332	Colon & Rectum	345
	Colon & Rectum	677	Bladder	214	Corpus Uteri	124
	Bladder	284	Non-Hodgkin's Lymphoma	128	Non-Hodgkin's Lymphoma	105
Allen	All Cancers	436	All Cancers	252	All Cancers	184
	Lung	97	Lung	65	Breast	45
	Prostate	61	Prostate	61	Lung	32
	Colon & Rectum	52	Colon & Rectum	26	Colon & Rectum	26
	Breast	46	Bladder	14	Corpus Uteri	8
	Bladder	18	Oral Cavity & Pharynx	12	Ovary / Pancreas	7 *
Beauregard	All Cancers	638	All Cancers	339	All Cancers	299
	Lung	107	Prostate	96	Breast	77
	Prostate	96	Lung	65	Lung	42
	Breast	78	Colon & Rectum	39	Colon & Rectum	34
	Colon & Rectum	73	Bladder	31	Corpus Uteri	17
	Bladder	42	Non-Hodgkin's Lymphoma	13	Cervix Uteri / Skin Melanomas	12 *
Calcasieu	All Cancers	3,975	All Cancers	2,161	All Cancers	1,814
	Lung	698	Prostate	586	Breast	501
	Prostate	586	Lung	432	Lung	266
	Breast	504	Colon & Rectum	223	Colon & Rectum	242
	Colon & Rectum	465	Bladder	141	Non-Hodgkin's Lymphoma	78
	Bladder	186	Skin Melanomas	90	Corpus Uteri	73
Cameron	All Cancers	167	All Cancers	93	All Cancers	74
	Lung	38	Lung	28	Breast	27
	Breast	27	Prostate	20	Lung	10
	Prostate	20	Bladder	7	Colon & Rectum	9
	Colon & Rectum	14	Leukemias / Pancreas / Colon & Rectum	**	Ovary	6
	Bladder	8	Skin Melanomas / Non-Hodgkin's Lymphoma/ Oral Cavity & Pharynx	**	Corpus Uteri	**

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Jefferson Davis	All Cancers	690	All Cancers	359	All Cancers	331
	Lung	138	Prostate	97	Breast	87
	Prostate	97	Lung	77	Lung	61
	Breast	87	Colon & Rectum	39	Colon & Rectum	34
	Colon & Rectum	73	Bladder	21	Corpus Uteri	23
	Bladder	30	Oral Cavity & Pharynx	14	Pancreas	15
Region 6	All Cancers	6,212	All Cancers	3,338	All Cancers	2,874
	Lung	1,155	Prostate	891	Breast	795
	Prostate	891	Lung	736	Lung	419
	Breast	806	Colon & Rectum	388	Colon & Rectum	361
	Colon & Rectum	749	Bladder	177	Non-Hodgkin's Lymphoma	128
	Bladder	237	Non-Hodgkin's Lymphoma	112	Corpus Uteri	111
Avoyelles	All Cancers	874	All Cancers	507	All Cancers	367
	Lung	163	Prostate	119	Breast	94
	Colon & Rectum	121	Lung	116	Colon & Rectum	50
	Prostate	119	Colon & Rectum	71	Lung	47
	Breast	94	Kidney & Renal Pelvis	23	Non-Hodgkin's Lymphoma	18
	Non-Hodgkin's Lymphoma	35	Bladder	22	Cervix Uteri	16
Catahoula	All Cancers	212	All Cancers	130	All Cancers	82
	Lung	42	Prostate	38	Breast	21
	Prostate	38	Lung	27	Lung	15
	Colon & Rectum	24	Colon & Rectum	11	Colon & Rectum	13
	Breast	22	Bladder	8	Pancreas	**
	Bladder	10	Non-Hodgkin's Lymphoma	6	Corpus Uteri	**
Concordia	All Cancers	355	All Cancers	174	All Cancers	181
	Lung	83	Lung	50	Breast	45
	Colon & Rectum / Breast	46 *	Prostate	42	Lung	33
	Prostate	42	Colon & Rectum	24	Colon & Rectum	22
	Pancreas	21	Pancreas	12	Corpus Uteri	11
	Leukemias / Corpus Uteri	11 *	Leukemias	**	Pancreas / Cervix Uteri	9 *

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Grant	All Cancers	385	All Cancers	212	All Cancers	173
	Lung	84	Prostate	60	Breast	56
	Prostate	60	Lung	56	Lung	28
	Breast	57	Colon & Rectum	22	Colon & Rectum	21
	Colon & Rectum	43	Bladder	10	Corpus Uteri	10
	Non-Hodgkin's Lymphoma	15	Non-Hodgkin's Lymphoma	9	Ovary	8
LaSalle	All Cancers	394	All Cancers	219	All Cancers	175
	Prostate	71	Prostate	71	Breast	44
	Lung	70	Lung	44	Lung	26
	Breast	44	Bladder	19	Colon & Rectum	19
	Colon & Rectum	37	Colon & Rectum	18	Non-Hodgkin's Lymphoma	13
	Bladder	20	Leukemias	6	Corpus Uteri	7
Rapides	All Cancers	2,794	All Cancers	1,484	All Cancers	1,310
	Lung	479	Prostate	406	Breast	398
	Prostate	406	Lung	299	Lung	180
	Breast	404	Colon & Rectum	188	Colon & Rectum	159
	Colon & Rectum	347	Bladder	74	Non-Hodgkin's Lymphoma	59
	Non-Hodgkin's Lymphoma	109	Non-Hodgkin's Lymphoma	50	Corpus Uteri	47
Vernon	All Cancers	762	All Cancers	383	All Cancers	379
	Lung	158	Lung	97	Breast	90
	Breast	91	Prostate	84	Lung	61
	Colon & Rectum	89	Colon & Rectum	38	Colon & Rectum	51
	Prostate	84	Bladder	25	Ovary	19
	Bladder	36	Non-Hodgkin's Lymphoma	18	Non-Hodgkin's Lymphoma	15
Winn	All Cancers	436	All Cancers	229	All Cancers	207
	Lung	76	Prostate	71	Breast	47
	Prostate	71	Lung	47	Lung	29
	Breast	48	Colon & Rectum	16	Colon & Rectum	26
	Colon & Rectum	42	Bladder	15	Skin Melanomas	11
	Bladder	18	Larynx	10	Non-Hodgkin's Lymphoma	10

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Region 7	All Cancers	11,847	All Cancers	6,417	All Cancers	5,430
	Prostate	2,073	Prostate	2,073	Breast	1,561
	Lung	1,936	Lung	1,242	Colon & Rectum	738
	Breast	1,575	Colon & Rectum	737	Lung	694
	Colon & Rectum	1,475	Bladder	295	Corpus Uteri	264
	Bladder	414	Oral Cavity & Pharynx	202	Non-Hodgkin's Lymphoma	206
Bienville	All Cancers	470	All Cancers	261	All Cancers	209
	Prostate	105	Prostate	105	Breast	64
	Lung	66	Lung	47	Colon & Rectum	30
	Breast	65	Colon & Rectum	25	Lung	19
	Colon & Rectum	55	Bladder	10	Corpus Uteri / Cervix Uteri	9 *
	Bladder	17	Non-Hodgkin's Lymphoma	8	Bladder	7
Bossier	All Cancers	1,866	All Cancers	1,017	All Cancers	849
	Lung	348	Prostate	305	Breast	239
	Prostate	305	Lung	222	Lung	126
	Breast	240	Colon & Rectum	114	Colon & Rectum	108
	Colon & Rectum	222	Bladder	56	Ovary	39
	Bladder	75	Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma	32 *	Corpus Uteri	34
Caddo	All Cancers	5,576	All Cancers	2,934	All Cancers	2,642
	Prostate	979	Prostate	979	Breast	783
	Lung	864	Lung	530	Colon & Rectum	355
	Breast	790	Colon & Rectum	339	Lung	334
	Colon & Rectum	694	Bladder	134	Corpus Uteri	132
	Bladder	194	Oral Cavity & Pharynx	114	Non-Hodgkin's Lymphoma	97

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Claiborne	All Cancers	418	All Cancers	243	All Cancers	175
	Prostate	86	Prostate	86	Breast	60
	Breast	62	Lung	37	Lung / Colon & Rectum	22 *
	Lung	59	Colon & Rectum	30	Corpus Uteri	10
	Colon & Rectum	52	Bladder	13	Non-Hodgkin's Lymphoma	8
	Non-Hodgkin's Lymphoma	15	Kidney & Renal Pelvis	8	Cervix Uteri / Multiple Myeloma	**
DeSoto	All Cancers	668	All Cancers	365	All Cancers	303
	Prostate	121	Prostate	121	Breast	85
	Lung	110	Lung	72	Colon & Rectum	41
	Breast	86	Colon & Rectum	32	Lung	38
	Colon & Rectum	73	Bladder	23	Pancreas	17
	Bladder	32	Leukemias	11	Non-Hodgkin's Lymphoma	12
Natchitoches	All Cancers	749	All Cancers	368	All Cancers	381
	Lung	115	Prostate	100	Breast	103
	Colon & Rectum	108	Lung	71	Colon & Rectum	63
	Breast	103	Colon & Rectum	45	Lung	44
	Prostate	100	Bladder	17	Corpus Uteri	25
	Non-Hodgkin's Lymphoma / Corpus Uteri	25 *	Non-Hodgkin's Lymphoma	15	Ovary / Cervix Uteri	15 *
Red River	All Cancers	216	All Cancers	111	All Cancers	105
	Colon & Rectum	40	Prostate	27	Breast	22
	Lung	29	Colon & Rectum	20	Colon & Rectum	20
	Prostate	27	Lung	19	Lung	10
	Breast	22	Leukemias	**	Corpus Uteri / Cervix Uteri	7 *
	Corpus Uteri / Cervix Uteri	7 *	Larynx	**	Non-Hodgkin's Lymphoma	**

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Sabine	All Cancers	639	All Cancers	385	All Cancers	254
	Lung	126	Prostate	108	Breast	64
	Prostate	108	Lung	94	Colon & Rectum	37
	Colon & Rectum	78	Colon & Rectum	41	Lung	32
	Breast	64	Bladder	16	Non-Hodgkin's Lymphoma	13
	Non-Hodgkin's Lymphoma	22	Oral Cavity & Pharynx	14	Corpus Uteri	11
Webster	All Cancers	1,245	All Cancers	733	All Cancers	512
	Prostate	242	Prostate	242	Breast	141
	Lung	219	Lung	150	Lung	69
	Colon & Rectum	153	Colon & Rectum	91	Colon & Rectum	62
	Breast	143	Bladder	25	Non-Hodgkin's Lymphoma / Corpus Uteri	26 *
	Non-Hodgkin's Lymphoma	47	Skin Melanomas	23	Cervix Uteri / Ovary	20 *
Region 8	All Cancers	8,345	All Cancers	4,518	All Cancers	3,827
	Lung	1,524	Prostate	1,319	Breast	1,098
	Prostate	1,319	Lung	1,000	Lung	524
	Breast	1,114	Colon & Rectum	449	Colon & Rectum	483
	Colon & Rectum	932	Bladder	189	Corpus Uteri	181
	Skin Melanomas	278	Skin Melanomas	161	Non-Hodgkin's Lymphoma	126
Caldwell	All Cancers	274	All Cancers	160	All Cancers	114
	Lung	61	Lung	40	Breast	27
	Colon & Rectum	39	Prostate	34	Lung	21
	Prostate	34	Colon & Rectum	19	Colon & Rectum	20
	Breast	28	Oral Cavity & Pharynx	10	Non-Hodgkin's Lymphoma	7
	Non-Hodgkin's Lymphoma	12	Bladder	7	Cervix Uteri	**

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
East Carroll	All Cancers	248	All Cancers	146	All Cancers	102
	Prostate	50	Prostate	50	Breast	33
	Lung	46	Lung	31	Lung	15
	Breast	33	Colon & Rectum	19	Colon & Rectum	10
	Colon & Rectum	29	Oral Cavity & Pharynx	7	Cervix Uteri / Kidney & Renal Pelvis	7 *
	Kidney & Renal Pelvis	10	Skin Melanomas / Bladder	**	Pancreas	**
Franklin	All Cancers	550	All Cancers	302	All Cancers	248
	Lung	102	Prostate	91	Breast	57
	Prostate	91	Lung	64	Lung	38
	Breast	57	Colon & Rectum	32	Colon & Rectum	23
	Colon & Rectum	55	Pancreas / Bladder	12 *	Pancreas	19
	Pancreas	31	Leukemias	9	Corpus Uteri	11
Jackson	All Cancers	476	All Cancers	256	All Cancers	220
	Prostate	89	Prostate	89	Breast	62
	Lung	77	Lung	48	Lung	29
	Breast	63	Bladder	17	Colon & Rectum	26
	Colon & Rectum	42	Colon & Rectum	16	Cervix Uteri	13
	Bladder	20	Skin Melanomas	10	Corpus Uteri / Pancreas	11 *
Lincoln	All Cancers	883	All Cancers	472	All Cancers	411
	Lung	145	Prostate	137	Breast	131
	Prostate	137	Lung	97	Lung	48
	Breast	132	Colon & Rectum	40	Colon & Rectum	47
	Colon & Rectum	87	Skin Melanomas	29	Corpus Uteri	28
	Skin Melanomas	53	Bladder	25	Skin Melanomas	24

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Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Madison	All Cancers	214	All Cancers	113	All Cancers	101
	Lung	38	Prostate	31	Breast	28
	Prostate	31	Lung	25	Colon & Rectum	14
	Breast	28	Colon & Rectum / Esophagus / Stomach	9 *	Lung	13
	Colon & Rectum	23	Pancreas / Non-Hodgkin's Lymphoma / Leukemias	**	Pancreas	**
	Esophagus / Stomach	12 *	Bladder / Larynx	**	Non-Hodgkin's Lymphoma / Cervix Uteri / Kidney & Renal Pelvis	**
Morehouse	All Cancers	796	All Cancers	429	All Cancers	367
	Prostate	140	Prostate	140	Breast	116
	Lung	135	Lung	91	Colon & Rectum	49
	Breast	119	Colon & Rectum	40	Lung	44
	Colon & Rectum	89	Bladder	16	Corpus Uteri	14
	Bladder	28	Non-Hodgkin's Lymphoma	15	Pancreas / Bladder / Non-Hodgkin's Lymphoma	12 *
Ouachita	All Cancers	3,202	All Cancers	1,682	All Cancers	1,520
	Lung	583	Prostate	475	Breast	447
	Prostate	475	Lung	361	Lung	222
	Breast	453	Colon & Rectum	180	Colon & Rectum	191
	Colon & Rectum	371	Bladder	73	Corpus Uteri	77
	Non-Hodgkin's Lymphoma	112	Skin Melanomas	65	Non-Hodgkin's Lymphoma	50
Richland	All Cancers	598	All Cancers	343	All Cancers	255
	Lung	121	Prostate	95	Breast	68
	Prostate	95	Lung	86	Lung	35
	Breast	70	Colon & Rectum	24	Colon & Rectum	33
	Colon & Rectum	57	Bladder	16	Corpus Uteri	15
	Skin Melanomas / Non-Hodgkin's Lymphoma	21 *	Leukemias	14	Ovary	11

* Number of cases is the same at each site.

** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Tensas	All Cancers	141	All Cancers	81	All Cancers	60
	Lung	36	Prostate	32	Breast	14
	Prostate	32	Lung	24	Lung	12
	Colon & Rectum	20	Colon & Rectum	9	Colon & Rectum	11
	Breast	14	Leukemias	**	Bladder	**
	Leukemias	**	Larynx	**	Multiple Myeloma / Corpus Uteri	**
Union	All Cancers	619	All Cancers	329	All Cancers	290
	Lung	119	Prostate / Lung	84 *	Breast	81
	Prostate / Colon & Rectum	84 *	Colon & Rectum	40	Colon & Rectum	44
	Breast	83	Oral Cavity & Pharynx	20	Lung	35
	Skin Melanomas	24	Stomach / Skin Melanomas	11 *	Ovary	14
	Oral Cavity & Pharynx	23	Non-Hodgkin's Lymphoma / Leukemias	8 *	Skin Melanomas	13
West Carroll	All Cancers	344	All Cancers	205	All Cancers	139
	Prostate / Lung	61 *	Prostate	61	Breast	34
	Colon & Rectum	36	Lung	49	Colon & Rectum	15
	Breast	34	Colon & Rectum	21	Lung	12
	Non-Hodgkin's Lymphoma	15	Oral Cavity & Pharynx	12	Non-Hodgkin's Lymphoma	10
	Oral Cavity & Pharynx / Bladder	13 *	Bladder	9	Corpus Uteri	8
Region 9	All Cancers	8,038	All Cancers	4,369	All Cancers	3,669
	Lung	1,468	Prostate	1,269	Breast	1,124
	Prostate	1,269	Lung	929	Lung	539
	Breast	1,136	Colon & Rectum	461	Colon & Rectum	428
	Colon & Rectum	889	Bladder	229	Non-Hodgkin's Lymphoma	161
	Non-Hodgkin's Lymphoma	318	Kidney & Renal Pelvis	172	Corpus Uteri	144

* Number of cases is the same at each site.

** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Livingston	All Cancers	1,490	All Cancers	801	All Cancers	689
	Lung	313	Prostate	232	Breast	193
	Prostate	232	Lung	186	Lung	127
	Breast	196	Colon & Rectum	68	Colon & Rectum	83
	Colon & Rectum	151	Bladder	47	Non-Hodgkin's Lymphoma	27
	Bladder	63	Kidney & Renal Pelvis	28	Corpus Uteri	22
St. Helena	All Cancers	117	All Cancers	76	All Cancers	41
	Prostate	29	Prostate	29	Breast	15
	Lung	24	Lung	18	Lung	6
	Breast	15	Colon & Rectum	9	Colon & Rectum	**
	Colon & Rectum	13	Larynx	**	Larynx / Multiple Myeloma	**
	Larynx	**	Multiple Myeloma / Esophagus / Non-Hodgkin's Lymphoma	**	Kidney & Renal Pelvis / Bladder / Corpus Uteri / Pancreas / Liver / Oral Cavity & Pharynx / Cervix Uteri / Hodgkin's Disease	**
St. Tammany	All Cancers	3,396	All Cancers	1,832	All Cancers	1,564
	Lung	561	Prostate	538	Breast	522
	Prostate	538	Lung	343	Lung	218
	Breast	527	Colon & Rectum	186	Colon & Rectum	166
	Colon & Rectum	352	Bladder	106	Non-Hodgkin's Lymphoma	80
	Non-Hodgkin's Lymphoma	163	Kidney & Renal Pelvis	87	Ovary	69
Tangipahoa	All Cancers	1,871	All Cancers	1,019	All Cancers	852
	Lung	350	Prostate	286	Breast	245
	Prostate	286	Lung	230	Lung	120
	Breast	246	Colon & Rectum	135	Colon & Rectum	105
	Colon & Rectum	240	Bladder	41	Non-Hodgkin's Lymphoma / Corpus Uteri	33 *
	Non-Hodgkin's Lymphoma	61	Oral Cavity & Pharynx	37	Ovary	32

* Number of cases is the same at each site.

** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Top Five Cancers And Number Of Cases Diagnosed In Louisiana By Region And Parish, 1994-1998

Region/Parish	Total		Males		Females	
Washington	All Cancers	1,164	All Cancers	641	All Cancers	523
	Lung	220	Prostate	184	Breast	149
	Prostate	184	Lung	152	Colon & Rectum	70
	Breast	152	Colon & Rectum	63	Lung	68
	Colon & Rectum	133	Bladder	34	Corpus Uteri	25
	Bladder	46	Kidney & Renal Pelvis	23	Pancreas / Non-Hodgkin's Lymphoma	21 *

* Number of cases is the same at each site.

** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

Source: Louisiana Tumor Registry

F. CHRONIC DISEASE—BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

Behavior-related illness and injury, such as heart disease, cancer, cerebrovascular disease, and motor vehicle-related injuries result in the premature death or compromised lifestyle of thousands of Louisiana residents each year. Most of the adults in the state report that they engage in at least one health behavior that place them at an increased, but avoidable, risk for these outcomes.

Prevention of illness before it occurs is a central aspect of the public health system. Achievement of this goal requires an understanding of the risk factors that lead to illness and of the behaviors that put an individual at risk of illness. The goal of primary prevention programs is to reduce or prevent initiation of behaviors, such as smoking, alcohol use, sedentary lifestyles, and poor eating habits, known to be associated with chronic disease. The goal of secondary prevention is to reduce or delay chronic illnesses and deaths through the early identification and treatment of persons with early signs/symptoms of diseases, by promoting the use of scientifically validated screening exams for early detection of certain cancers, hypertension, breast cancer, and diabetes.

To collect information needed by its primary and secondary prevention programs, the Louisiana OFFICE OF PUBLIC HEALTH CHRONIC DISEASE CONTROL PROGRAM, in cooperation with the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), began in 1991 to participate in the Behavioral Risk Factor Surveillance System (BRFSS). The purpose of the BRFSS is to provide state-level prevalence data on health-related behaviors and attitudes. Information collected in the survey is being used in the state's ongoing effort to plan, develop, and evaluate health promotion and disease prevention programs. Data from the BRFSS are also used to monitor progress toward achieving the national objectives of the Healthy People 2000 program of the United States Department of Health and Hospitals (USDHHS, 1990).

Adults ages 18 years and older who do not live in institutions such as geriatric centers, hospitals, jail, or prison may be included in the BRFSS. Some survey questions are asked each year and some are asked on alternating years. The following information, representing non-institutionalized Louisiana adult residents ages 18 and older, are from the most recent BRFSS that collected the specified data.

BRFSS: Tobacco Use

Cigarette Smoking

Tobacco use is responsible for more than 430,000 deaths among adults annually in the United States, accounting for a number greater than deaths due to alcohol, motor vehicle injuries, suicides, AIDS, homicide, illegal drugs, and firearms combined. With current trends continuing, it is estimated that more than 5 million years of potential life will be lost and will cost in excess of $50 billion per year in direct medical costs.

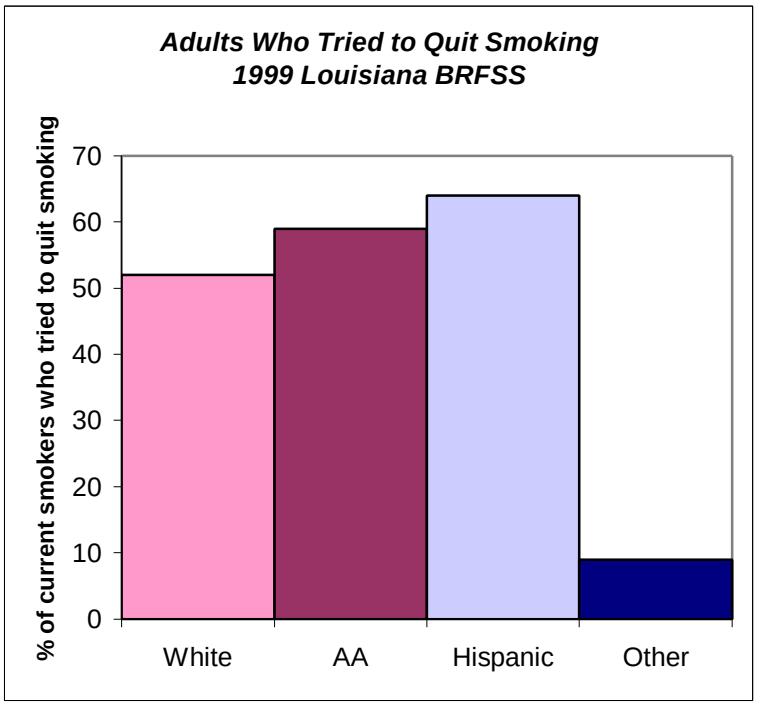
Adults:

i. Current Smokers: In 1999, according to BRFSS results, approximately one in four adult Louisianans was a current smoker and is at risk of developing smoking related illnesses which include heart disease, lung cancer, cancer of pancreas, kidney, and cervix.

Demographic Profile of Current Smokers 1999 Louisiana BRFSS									
Age	% Who Currently Smoke	Sex	% Who Currently Smoke	Race	% Who Currently Smoke	Income	% Who Currently Smoke	Education	% Who Currently Smoke
18-24	29.1	Male	26.8	White	24.7	Less than $15,000	30.7	Less than H.S.	28.2
25-34	27.1	Female	20.6	African American	19.6	$15,000-$24,999	25.0	H.S. or G.E.D.	27.5
35-44	29.4			Hispanic	28.6	$25,000-$34,999	24.3	Some post-H.S.	24.3
45-54	21.8					$35,000-$49,999	25.4	College Graduate	12.9
55-64	22.9					$50,000+	19.2		
65+	9.6								

Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

ii. Cessation: Among current smokers, according to 1999 BRFSS results, 53% attempted to quit smoking for one or more days during the twelve months preceding the survey. Males (56%) were more likely to attempt to quit smoking compared to females. Other groups more likely to attempt to quit smoking included the 18-24 year age group (77%), African Americans (59%) and individuals with a high school or G.E.D. level of education (57%).



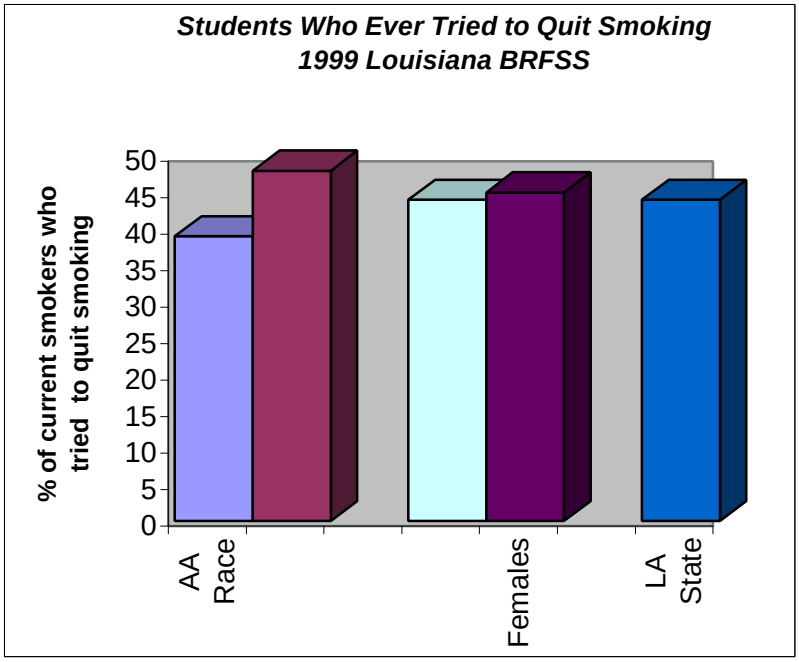
Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

Youth:

i. Current Smokers: Approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking (State Tobacco Control Highlights 1999). More than a fourth (27.3%) of students in Louisiana smoked a whole cigarette for the first time before the age of 13, with a higher prevalence among white males (Department of Education, YRBSS 1997).

Lifetime prevalence of cigarette use for Louisiana students ranges from 27% in the 6th grade to a high of 64% in the 12th grade. Twenty two percent of Louisiana students reported using cigarettes in the past 30 days and 30% of the youth reported that they got their cigarettes from a store or gas station (Communities That Care Survey 1999, Office of Addictive Disorders).

ii. Cessation: According to 1997 YRBSS data, approximately 44% of the 9th – 12th graders who currently smoke have tried to quit at least once. White teenagers (48%) were more likely to try quitting compared to African Americans (39%), while the rates were nearly equal for both males (44%) and females (45%). Teenagers in the 9th grade (47%) were more likely to try quitting compared to 12th graders (42%).



Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

Pregnant Women

Evidence shows that maternal tobacco use is associated with mental retardation, low birth weight and birth defects such as oral clefts. In Louisiana, according to LAPRAMS data in 1998, 14% of the women reported smoking during the last trimester of their pregnancy, with the rates higher in white women and in women with less than high school education.

Smokeless Tobacco

The link between occurrence of oral cancer and the use of smokeless tobacco, snuff, and chewing tobacco has been clearly documented; the available research shows that snuff use increases the risk of oral cancer among nonsmokers four-fold. Among chronic snuff users the excess risk of cancer of the gum and buccal mucosa reaches nearly fifty-fold. In the United

States, more than 30,000 cases a year of oral cancer are attributed to the use of smokeless tobacco.

According to 1999 BRFSS results, 14% of adult population ever used smokeless tobacco and was higher in males (27%) compared to females (2.1%). Four percent of adults in Louisiana currently use smokeless tobacco and are therefore at risk for illnesses related to smokeless tobacco use.

Demographic Profile of Current Smokeless Tobacco Users 1999 Louisiana BRFSS					
Gender	*% Who Currently Use Smokeless Tobacco*	*Age*	*% Who Currently Use Smokeless Tobacco*	*Education*	*% Who Currently Use Smokeless Tobacco*
Male	8.5	18-24	7.6	Less than H.S.	1.6
Female	0.1	25-34	5.9	H.S. or E.D.	5.1
		35-44	4.9	Some post H.S.	4.1
		45-54	1.8	College graduate	4.2
		55-64	1.6		
		65+	2.0		

Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

Secondhand Smoke

Environmental Tobacco Smoke (ETS) or Secondhand Smoke kills more than 53,000 deaths annually in the United States. Secondhand smoke is a proven cause of respiratory problems in nonsmokers. Secondhand smoke causes 30 times as many lung cancer deaths as all regulated air pollutants combined. An estimated number of 294,892 Louisiana youth were exposed to environmental tobacco smoke in their homes in 1996. (http://www.cdc.gov/tobacco/statehi/htmltext/la_sh.htm).

Smoking and Insurance

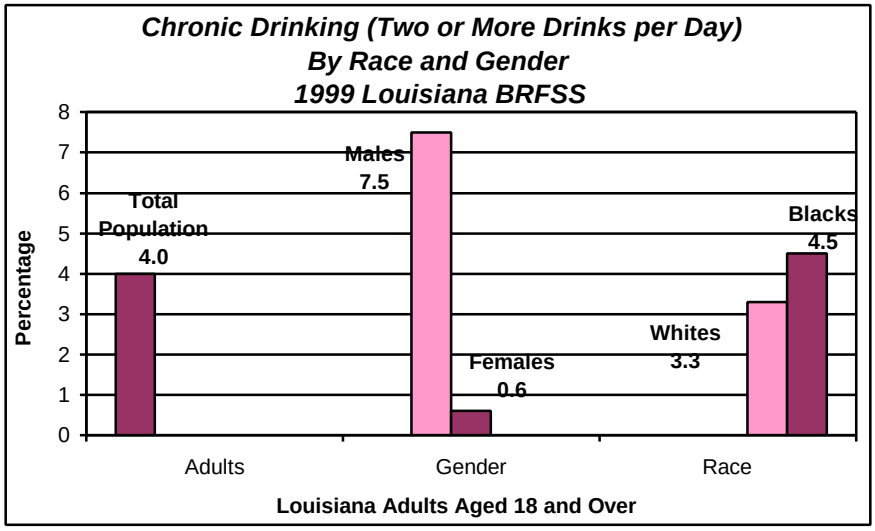
Persons on Medicaid and with no health insurance have higher rates of current smoking that with persons with private insurance. Since almost half of Louisiana residents are on Medicaid or have no health insurance, it likely that the state bears close to half of all direct medical care costs due to tobacco through Medicaid or indigent care (SAMMEC 1994).

BRFSS: Alcohol Use

Health and social problems associated with heavy, chronic, and binge drinking are well recognized. Liver diseases are associated with chronic alcohol abuse, and fatal motor vehicle accidents are associated with heavy chronic and binge drinking. Chronic drinking is defined as two or more drinks daily for thirty days or at least sixty drinks per month. Binge drinking is defined as five or more drinks on one or more occasions within thirty days.

Based on the 1999 BRFSS, approximately 15.0% of the Louisiana adult population reported at least one episode of binge drinking in the thirty days prior to the survey. Men (24.8%) were four times more likely to engage in binge drinking than women (6.4%) were. Whites (16.0%) were more likely to report binge drinking than Blacks (11.1%). The prevalence of binge drinking decreased with increasing age.

Approximately 4.0% of adult Louisianians reported that they consumed at least two alcoholic drinks each day of the month prior to the survey. Males (7.5%) were more likely than females (0.6%) to report chronic alcohol use. Whites (3.3%) were less likely than Blacks (4.5%) to report chronic alcohol use.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

Drinking and Driving

Many studies suggest that automobile crashes in which alcohol plays a role tend to be much more severe than other crashes. Nationally, alcohol plays a role in about 20% of crashes involving serious injury to driver or passenger, about 50% of all fatal crashes, and about 60% of single-vehicle fatal crashes. Estimates place the number of deaths in the United States attributed to alcohol-related motor vehicle crashes at over 22,000.

Of those who indicated they had consumed alcohol in the month prior to the survey, 4.8% indicated that on at least one occasion they had driven when they had had too much to drink.

BRFSS: Nutrition and Exercise

Nutrition and exercise are important to good health overall and are related to weight or body fatness. Increases in body fatness are associated with high blood pressure, diabetes, coronary heart disease, and atherosclerosis. Additionally, high fat, low fiber diets are associated with various types of cancer.

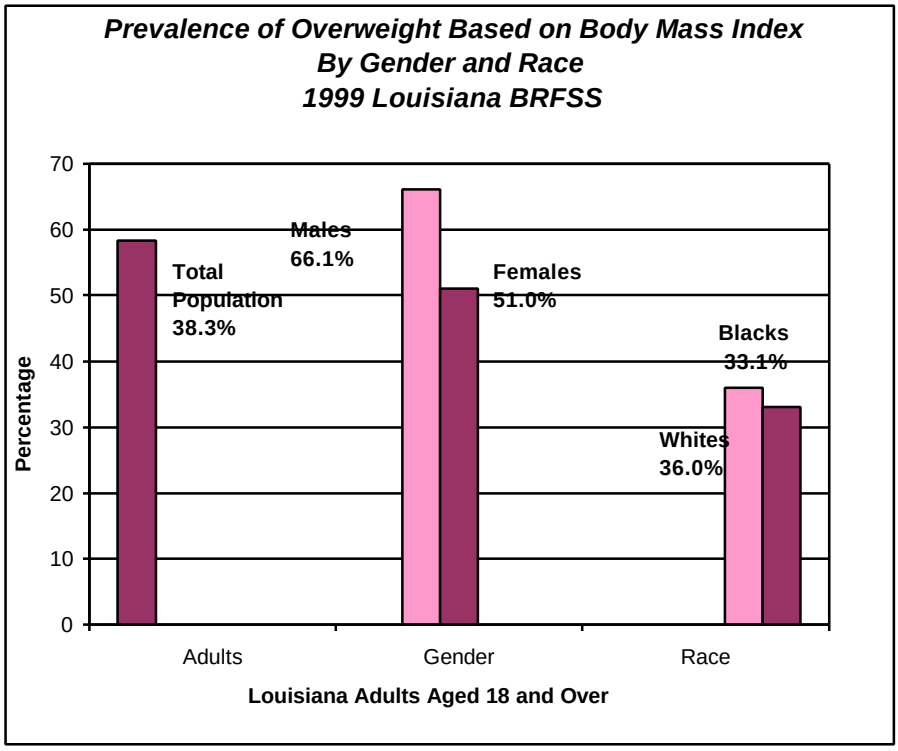
Overweight

The Body Mass Index (BMI) is a measure of body fatness derived from height and weight. A BMI of 25.0 or greater is considered overweight. A BMI of 30.0 or greater is considered obese.[3]

Over half (58.3%) of Louisiana adults are overweight. With increasing age, there is a general trend toward increasing prevalence of overweight. Males (66.1%) were more likely than females (51.0%) to be overweight. Whites (36.0%) were more likely than Blacks (33.1%) to be overweight, although Blacks (28.6%) were more likely than Whites (18.9%) to be obese. With age, prevalence increases up to age 65 years. Interestingly, Americans overall are not eating

[3] National Center for Health Statistics. *Healthy People 2000 Review, 1997* . Hyattsville, Maryland: Public Health Service. 1997.

many more calories. The weight increases are tied more directly to a marked decline in physical activity.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

Fruit and Vegetable Consumption

The National Academy of Sciences, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, the American Cancer Society and the National Cancer Institute specify in their dietary guidelines for fiber intake that at least five servings of fruit and vegetables per day are consistent with the maintenance of good health and cancer prevention.

According to the 1998 BRFSS data, 83% of adults in Louisiana reported not eating at least 5 servings of fruit and vegetables per day.

Physical Activity

The Surgeon General's report *Physical Activity and Health*[4] concluded that individuals of all ages who engage in regular physical activity have a lower mortality rate than individuals with sedentary lifestyles. While higher levels of fitness have greater health benefits, studies suggest that even moderate amounts of activity are beneficial. New research indicates that thirty minutes of moderate physical activity, even if broken into three ten-minute episodes, convey significant health benefits. Increases in physical activity are associated with decreases in body fatness, lowering of blood pressure, and increased glucose tolerance.

[4] U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta, GA. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

Persons who report no physical activity outside of work are classified as sedentary. According to the 1998 BRFSS data, 83.9% of Louisiana adults is physically inactive; that is, they had not been involved in leisure time physical activities in the month preceding the survey. The prevalence of sedentary lifestyles was similar for males (82.2%) and females (85.4%).

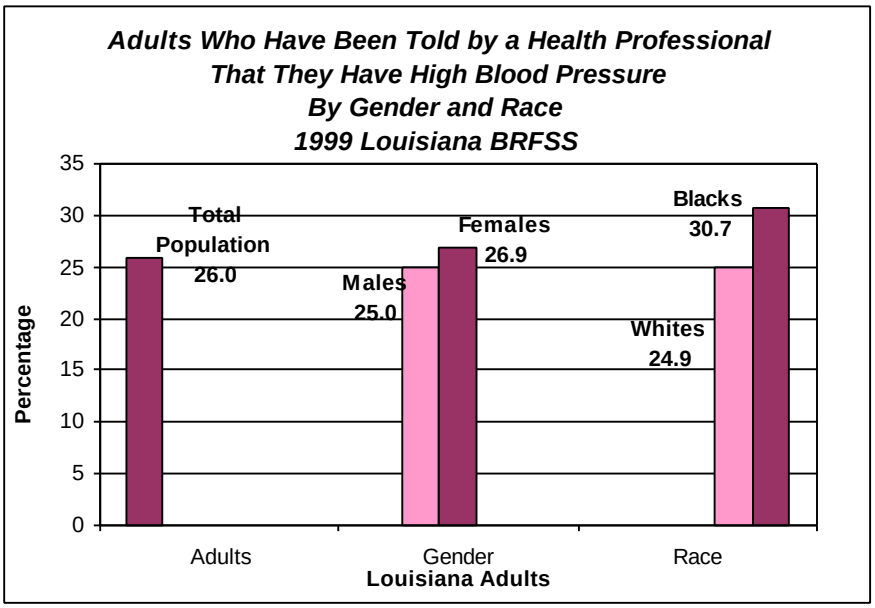
BRFSS: Health Status

Overall, the health status of the adult population may be reflected in the chronic disease burden. Chronic diseases of public health importance (i.e. diseases that are among the leading causes of death, that have high economic and disability impact, etc.) include hypertension, high cholesterol, and diabetes. The goal of public health with regard to these diseases is early detection through periodic screening and treatment.

High Blood Pressure (Hypertension)

High blood pressure is associated with increased risk for stroke, kidney failure, and coronary heart disease. Blood pressure tends to increase with age and can be affected by weight gain, physical inactivity, and, to a lesser extent, diet. Blood pressure should be checked periodically; individuals with high levels (greater than 140/90 mm Hg) recorded more than once should be referred for treatment.

Approximately one out of every four Louisianians (26%), have been told by a health professional that they have high blood pressure. While there were no significant differences regarding gender, a large differential exists between races; 24.9% of Whites and 30.7% of Blacks indicated they were ever told that they had high blood pressure.

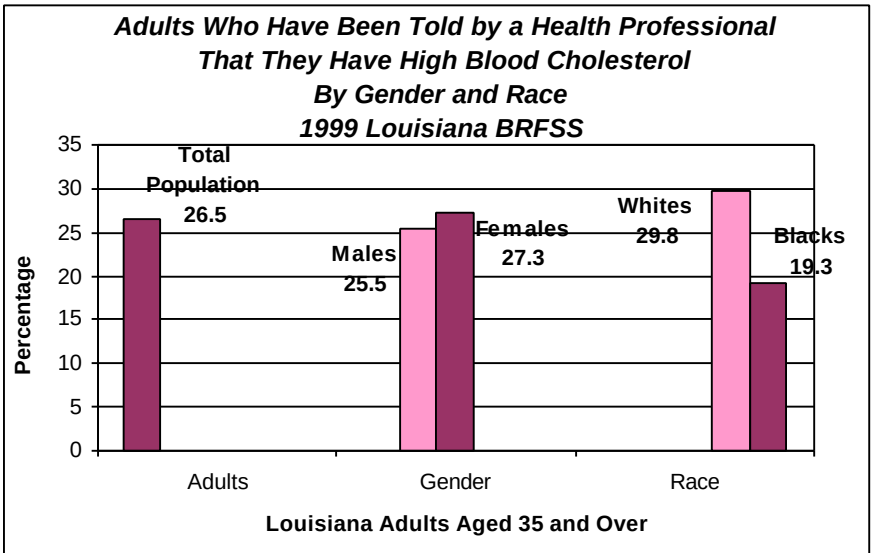


Source: Louisiana Office of Public Health, Chronic Diseases Control Program, 1999 BRFSS

High Cholesterol

High blood cholesterol is one of the major modifiable risk factors for coronary heart disease. It has been estimated that each 1% reduction in blood cholesterol levels results in a 2% reduction in the risk for heart disease.

One in four (26.5%) Louisiana adults indicated that a physician or nurse had told him that he had high blood cholesterol. Approximately 25.5% of males and 27.3% of females indicated they had been told by a health professional that they had high cholesterol.



Source: Louisiana Office of Public Health, Chronic Disease Control Program, 1999 BRFSS

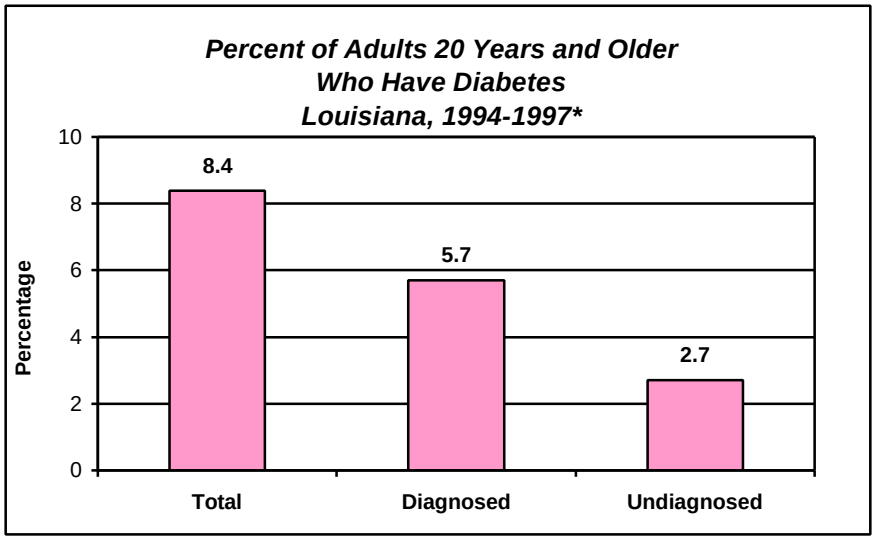
Diabetes

Diabetes is a complex, serious, and increasingly common disease. It is characterized by inappropriate high glucose level in the blood, resulting from inadequate insulin production, inability of the body to use insulin, or both. Insulin is a hormone secreted by the pancreas that allows glucose to enter body cells and to be converted to energy, protein, and fat. Persons who are obese, physically inactive, or members of ethnic minorities (African-Americans, Hispanic/Latino Americans, and American Indians) and those with family history of diabetes or prior gestational diabetes are at a higher risk of acquiring diabetes.

Diabetes is the most common cause of non-traumatic amputations and end-stage renal disease and the leading cause of blindness in adults aged 20 to 74. In 1993, in Louisiana, diabetes caused an estimated 276 new cases of blindness, 1,162 lower extremity amputations, 417 new cases of end-stage kidney disease and 66,965 diabetes-related hospitalizations. The annual direct and indirect costs from diabetes in Louisiana exceed $2 billion dollars.

Diabetes affects about 16 million Americans or 6% of the population of the United States. In 1994, Louisiana ranked second in the United States in self-reported prevalence of diagnosed diabetes.

An estimated 365,000 or 8.4% (5.7% diagnosed and 2.7% undiagnosed diabetes) of Louisiana residents 20 years and older have diabetes. Of the persons with diabetes, 32% or 115,000 are undiagnosed or unaware that they have diabetes and are therefore not receiving recommended treatment to prevent or delay the onset of complications. Over a million additional persons may be at increased risk for diabetes because of the risk factors of age, obesity, and sedentary lifestyle.



*Louisiana BRFSS aggregated for 1994-1997 for diagnosed and NHANES III for undiagnosed diabetes

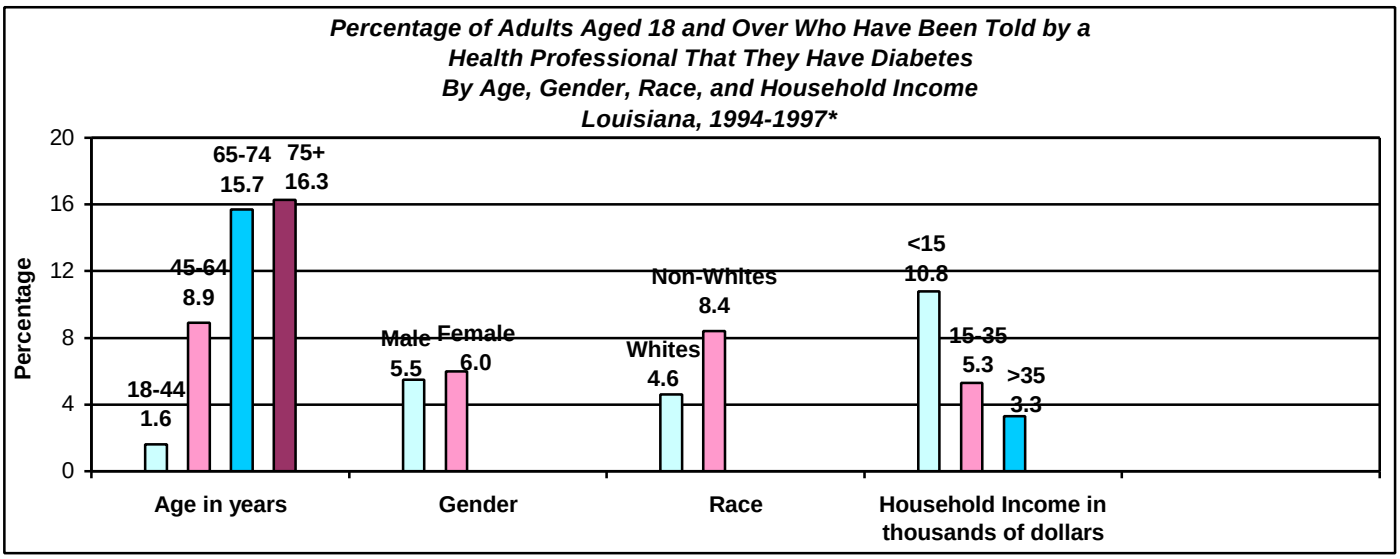
Source: Louisiana Office of Public Health, Chronic Disease Control Program

In 1998, in-depth analysis of diabetes in Louisiana was performed using the most current available information. Data were compiled from the Louisiana BRFSS 1994-1997 interviews and the National Health and Nutrition Survey (NHANES III) conducted by the U.S. Centers for Disease Control. Analysis showed no statistically significant difference between females and males or among regions in Louisiana in self-reported risk of being diagnosed with diabetes. The prevalence of diabetes, however, increased as age increased, with the lowest rate of 1.6% in the 18 to 44 age group and the highest rate of 16.3% in 75+ age group. Persons older than 44 years were 7.4 times more likely to be diagnosed with diabetes as compared with persons less than 44 years of age.

Four point six percent of Whites and 8.4% of African-Americans reported having been diagnosed with diabetes. That is, the risk of being diagnosed with diabetes among African-Americans was 1.8 times higher than the risk among Whites. The prevalence of diabetes decreased with increasing household income. Individuals living in households with income less than $15,000 a year had the highest prevalence --10.8% -- while those living in households with annual incomes ranging from $15,000 to $35,000 and those above $35,000 had rates of 5.3% and 3.3% respectively. In other words, the risk of being diagnosed with diabetes among persons with household income of less than or equal to $15,000 was 2.3 times higher compared with the risk among households with an annual income of over $15,000. Of the persons with diabetes, 55% were females, 84% were over 44 years of age (mean age of 61 years), 56% were white, 33% had a household income of less than $15,000, 33% were employed, and 41% were retired.

Diabetes is a risk factor for coronary heart disease and stroke. In fact, of the persons with diabetes in 1997, 13% were told they had coronary artery disease and 10% that they had had a stroke. Persons with diabetes are at even higher risk for cardiovascular disease morbidity and

mortality because of the co-existence of other independent risk factors for cardiovascular disease. Fifty-one percent of persons with diabetes were found to be overweight based on body mass index, 29% were self-reported current smokers, 50% were told they have high blood pressure, and 38% were told they have high cholesterol. In addition, 68% reported no leisure time physical activity and 76% reported consuming less than the recommended five servings of fruit and vegetables a day.



*Louisiana BRFSS aggregated for 1994-1997

Source: Louisiana Office of Public Health, Chronic Disease Control Program

Diabetes is a common and serious disease in Louisiana. It is a costly disease not only in terms of the economic burden it imposes on the state but also in terms of the human suffering inflicted by the disease and its complications. At least 365,000 or 8.4% of Louisiana residents 20 years and older have diabetes. The prevalence of diabetes will continue to increase if the following trends continue: increase in the prevalence of obesity, aging of the population, growth in minority populations, and persistence of socioeconomic gaps. Persons older than 44 years of age, African-Americans, and individuals with household incomes of less than $15,000 are at higher risk of having diagnosed diabetes.

Diabetes surveillance should continue in order to identify high-risk groups, to monitor health outcomes and indicators of the quality of health care recommended for people with diabetes, to provide data to formulate health care policy, and to evaluate progress in disease prevention and control.

There is a need to develop effective intervention strategies to reduce the burden of diabetes. Much of the diabetes burden can be prevented with better education for diabetes self-management, early detection and treatment of complications, and improved delivery and quality of care with intensified efforts focused at high risk groups including the elderly, African-Americans, and the poor. Primary prevention through promotion of healthy behaviors that reduce obesity, such as proper nutrition and regular physical activity, and secondary prevention of diabetes complications via better clinical preventive services, including regular foot exams, dilated eye exams, and improved blood glucose control, will go far in reducing the diabetes burden.

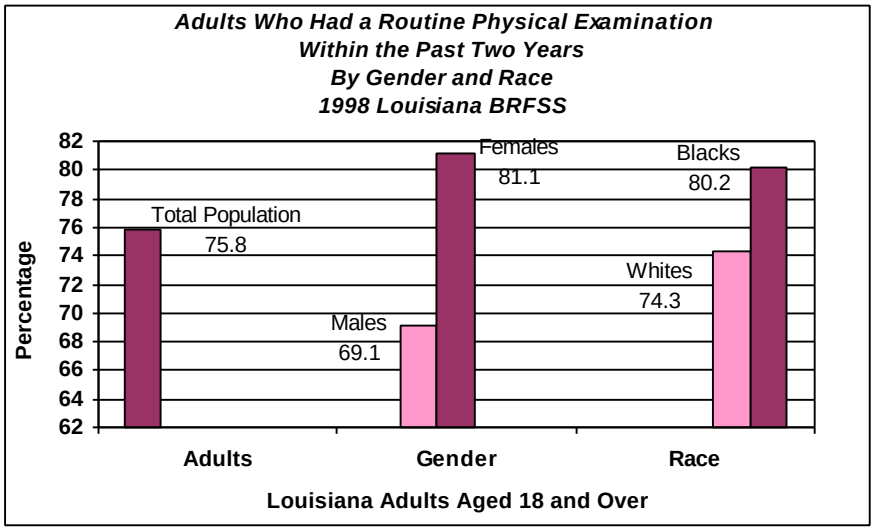
To reduce the burden of diabetes and diabetes complications, there is a need to develop new partnerships and to strengthen existing ones with private health care providers, appropriate governmental, voluntary, professional, and academic institutions and payers including Medicaid, managed care organizations, insurers, and employers. Because of the overlap in risk factors and intervention strategies, and programs for diabetes, cardiovascular and cerebrovascular diseases, and some cancers, prevention and control efforts need to be integrated and coordinated among several of the existing programs in chronic diseases within and outside the OFFICE OF PUBLIC HEALTH.

BRFSS: Preventive Health Care

Routine Medical Examinations

The routine medical examination gives the physician an opportunity to assess the general health status of patients, to assess the need for screening, and to counsel patients regarding perceived issues that affect the patient's health. Thus, it is the prime opportunity to practice preventive care.

In the 1998 BRFSS, 75.8% of the respondents had a routine checkup within the last year. Women (81.1%) were more likely than men (69.1%) to have had a routine checkup within the past two years. Blacks (80.2%) were more likely than Whites (74.3%) to have had a routine checkup within the last year.

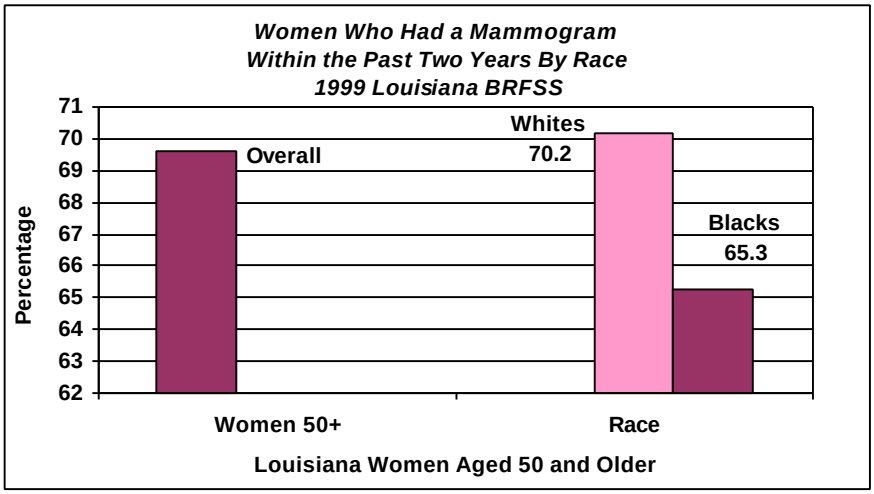


Source: Louisiana Office of Public Health, Chronic Disease Control Program, 1998 BRFSS

Mammography

Among women, breast cancer is the most commonly diagnosed cancer. Routine breast examinations by a health professional, or clinical breast examination and mammography are the most effective ways of detecting breast cancer early and improving the chances of survival. The National Cancer Institute, the American Cancer Society, and the United States Department of Health and Human Services recommend that women have a mammogram each year beginning at age 50. There is some controversy about the benefits of screening younger women.

In the 1999 BRFSS, among Louisiana women aged 50 and older, 69.6% reported they had had a mammogram within the two years before the survey. Blacks (65.3%) were less likely than Whites (70.2%) to report that they had a mammogram within the last two years.



Source: Louisiana Office of Public Health, Chronic Disease Control Program, 1999 BRFSS

Pap Smear

A Pap smear is used to obtain a sample of cervical cells to be evaluated for dysplasia or cervical cancer. The American Cancer Society recommends annual Pap tests for all women who are or have been sexually active or who have reached age 18. Once three annual Pap smears have been normal, the test can be done every three years unless a physician recommends more frequent testing.

Among women who had an intact uterus (had not had a hysterectomy), 85.4% had had a Pap smear within the past two years. There was no difference between races.

BRFSS: Medical Care Coverage

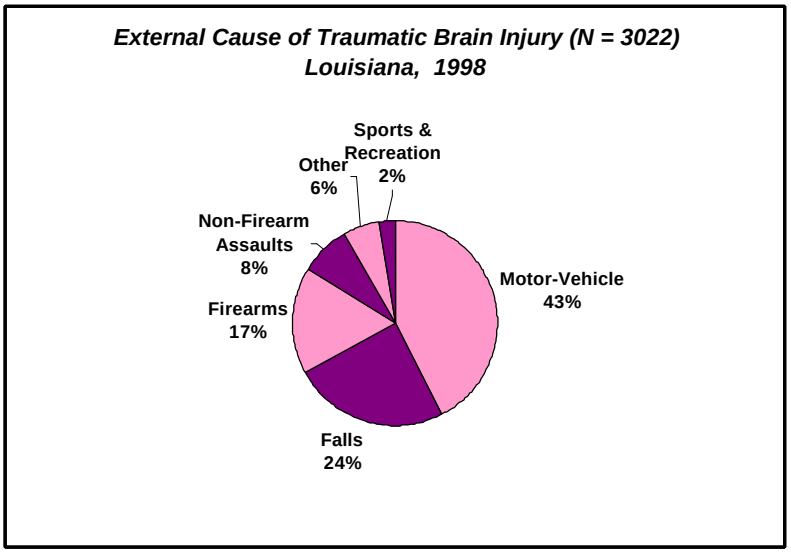
Availability of health care coverage is a crucial component in an individual's access to health care. An important Year 2000 Health Objective for the nation is to "improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force." Individuals without medical coverage, and even some individuals with coverage (underinsured), may not receive health care due to the cost of care. Therefore, measures of utilization of health care, including routine checkups, are dependent on coverage. The BRFSS assesses health care coverage by asking about private insurance, prepaid plans (HMOs), or Medicare.

Louisiana consistently has higher rates of adults with no health care coverage compared with the United States adult population at large.

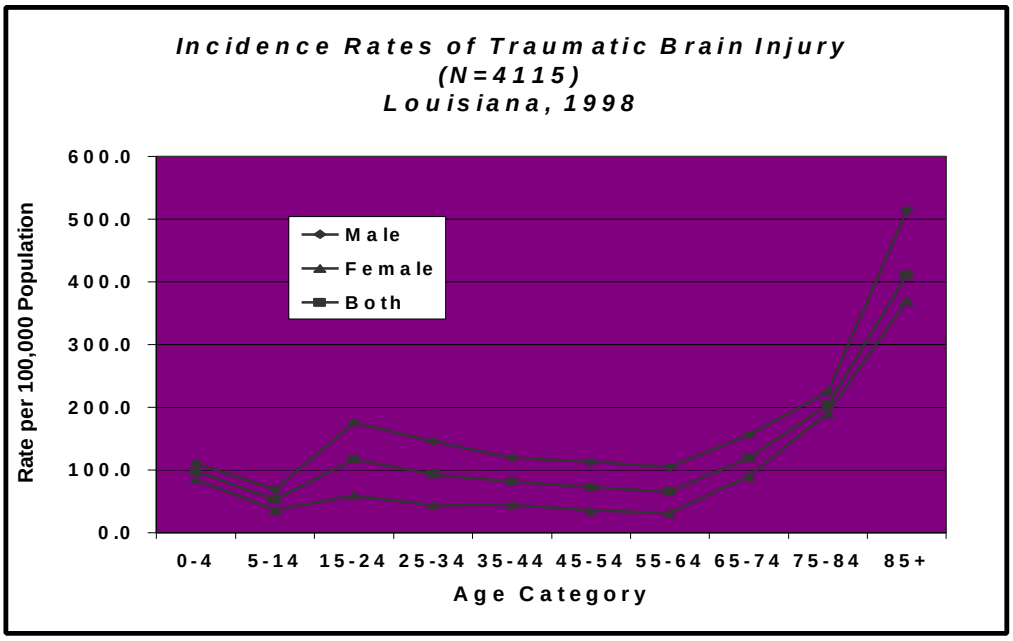
In the 1999 BRFSS, 22.4% of Louisiana adults who were surveyed reported that they had no health care coverage. While there were no disparities between rates of no health care coverage among females (23.3%) and males (21.4%), there was a clear racial difference, with Blacks (34.1%) being more likely than Whites (16.8%) to report a lack of health care coverage.

G. TRAUMATIC BRAIN INJURY

Traumatic brain injuries (TBI) are one of the most severe types of injuries in terms of both human suffering and costs to society. They are a major public health problem because of the permanence of the resulting disability, the high costs of acute and long-term treatment, and the fact that they frequently occur to young people. Traumatic brain injury is a reportable condition in Louisiana. The pie chart below highlights the importance of prevention to reduce the number of TBI. For example, seatbelt use will reduce the number of motor-vehicle-related injuries and removal of environmental hazards may reduce the number of falls. The line graph below highlights the importance of targeting those 15-24 years and 65 years and older, the two age groups with the highest incidence rates.



Source: Louisiana Office of Public Health, Injury Research and Prevention Section

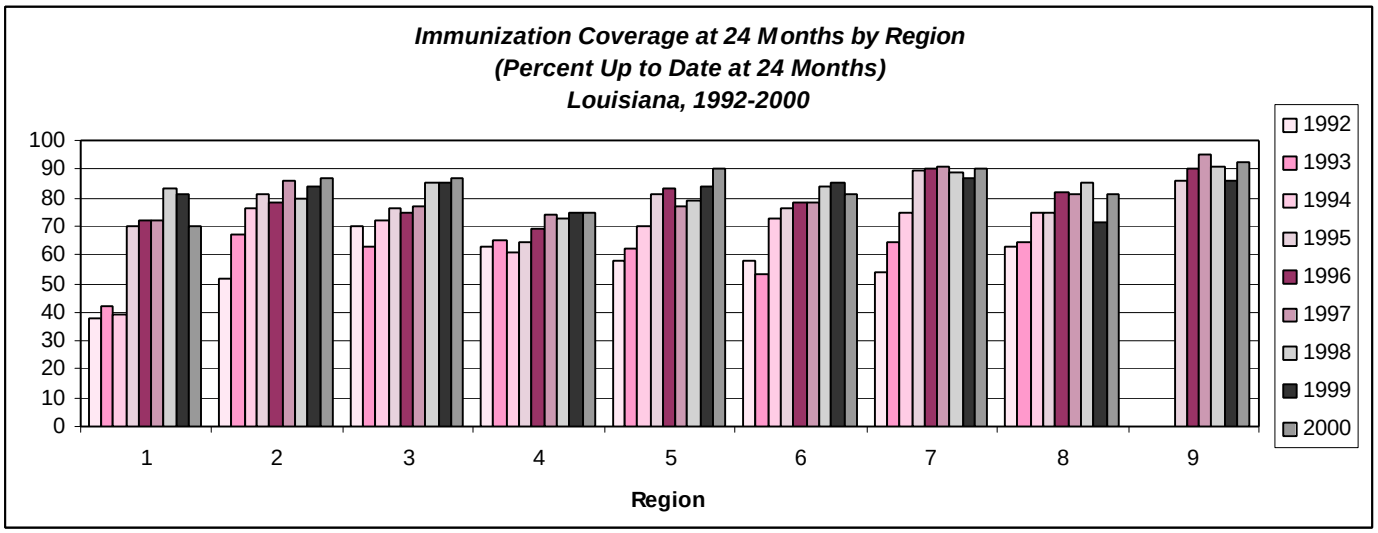


Source: Louisiana Office of Public Health, Injury Research and Prevention Section

III. HEALTH ASSESSMENT PROGRAMS

A. IMMUNIZATION COVERAGE

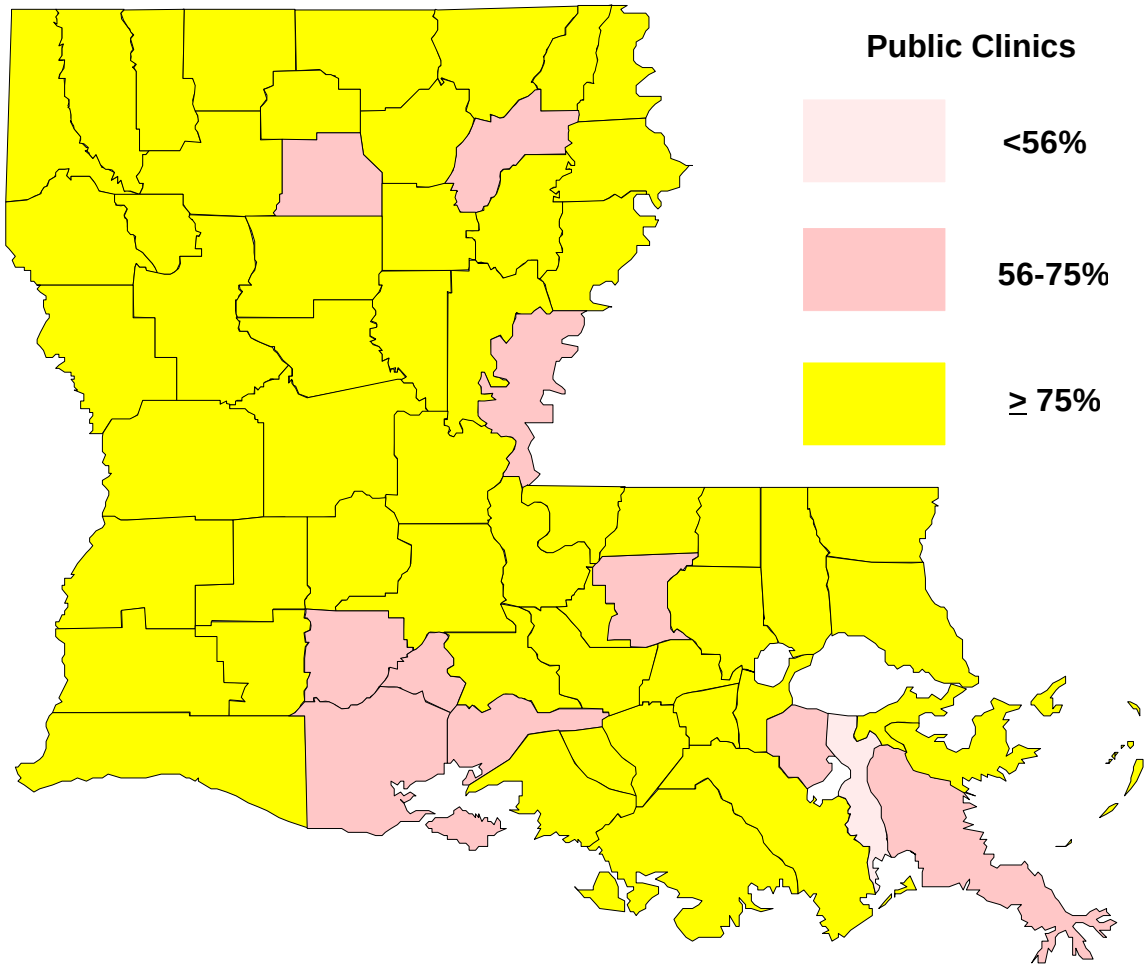
The IMMUNIZATION PROGRAM of the OFFICE OF PUBLIC HEALTH conducts periodic assessments to determine the immunization coverage rates throughout the state. As the graph below displays, rates of coverage have been steadily increasing since 1992, though there have been year to year variations.



Source: Louisiana Office of Public Health, Immunization Program

The map on the following page displays the percent of immunization coverage at 24 months of age among those served in public clinics. Jefferson parish has the lowest immunization coverage rate in the state (see following table).

Percent of Immunization Coverage at 24 Months of Age Among Children Served in Public Clinics Louisiana, 2000



Source: Louisiana Office of Public Health, Immunization Program

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana, 2000-2001	
Clinic	**%UTD 2000-2001 Results**
Region I	
Orleans-Edna Pilsbury	83.0
Jefferson-Grand Isle	61.0
Orleans-Mandeville Detiege	95.0
Orleans-Mary Buck	92.0
Orleans-Katherine Benson	93.0
Orleans-Helen Levy	90.0
Orleans-St. Bernard Gentilly	75.0
Orleans-Ida Hymel	62.0
St. Bernard	90.0
Jefferson-Marrero	53.0
Plaquemines	62.0
Jefferson-Metairie	51.0
Region II	
Ascension-Gonzales	96.0
Ascension-St. Amant	96.0
Ascension-Donaldsonville	94.0
West Baton Rouge	94.0
West Feliciana	92.0
Iberville	95.0
East Feliciana-Clinton	88.0
Pointe Coupee	84.0
E. Baton Rouge	78.0
E. Baton Rouge-Baker	55.0
Region III	
St. John-Edgard	100.0
St. James-Vacherie	99.0
St. James-Lutcher	99.0
Lafourche-Galliano	96.0
Lafourche-Thibodaux	100.0
Terrebonne	87.0
St. Mary-Franklin	84.0
St. Mary-Morgan City	97.0
St. John-Reserve	84.0
Lafourche-Raceland	88.0
Assumption	89.0
St. Charles	71.0
Region IV	
Evangeline-Mamou	94.0
Evangeline-Ville Platte	97.0
St. Landry-Sunset	95.0
St. Landry-Melville	91.0
St. Landry-Eunice	97.0
St. Martin-St. Martinville	92.0
St. Landry-Opelousas	83.0
Vermillion-Gueydan	45.0
Acadia-Iota	90.0
St. Martin-Cecilia	95.0
Acadia Crowley	84.0

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana, 2000-2001	
Clinic	**%UTD 2000-2001 Results**
Region IV (continued)	
Vermillion-Erath	62.0
Acadia-Church Point	65.0
Vermillion-Abbeville	76.0
St. Martin-Breaux Bridge	89.0
Acadia-Rayne	63.0
Lafayette	84.0
Vermillion-Kaplan	50.0
Iberia-New Iberia	70.0
Iberia-Jeanerette	50.0
Region V	
Allen-Oakdale	94.0
Calcasieu-Sulphur	98.0
Allen-Oberlin	95.0
Calcasieu-Dequincy	89.0
Calcasieu-Lake Charles	91.0
Jefferson Davis	91.0
Beauregard	95.0
Cameron	89.0
Region VI	
Catahoula-Harrisonburg	80.0
LaSalle	95.0
Rapides	90.0
Grant	88.0
Winn	83.0
Catahoula-Joneville	94.0
Concordia-Vidalia	72.0
Vernon	85.0
Avoyelles-Bunkie	76.0
Concordia-Ferriday	76.0
Avoyelles-Marksville	83.0
Region VII	
Bienville-Ringgold	96.0
Red River	92.0
Claiborne	94.0
Webster-Springhill	96.0
DeSoto	96.0
Natchitoches	94.0
Bienville-Arcadia	96.0
Caddo-Vivian	96.0
Sabine	96.0
Webster-Minden	90.0
Bossier-Bossier City	91.0
Caddo-Shreveport	81.0
Region VIII	
Morehouse-Basdrop	90.0
Franklin-Winnsboro	92.0
West Carroll-Oak Grove	88.0
Ouachita-Monroe	79.0

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

Immunizations: Percent Up-To-Date at Age 24 Months Louisiana, 2000-2001*	
Clinic	***%UTD 2000-2001 Results***
Region VIII (continued)	
Caldwell	95.0
Tensas-St. Joseph	93.0
Lincoln	77.0
Jackson-Jonesboro	68.0
East Carroll	83.0
Union	85.0
Richland-Rayville	74.0
Ouachita-West Monroe	76.0
Madison	83.0
Region IX	
St. Helena	100.0
Washington-Franklinton	97.0
Washington-Bogalusa	93.0
Tangipahoa-Hammond	100.0
Tangipahoa-Amite	99.0
St. Tammany-Covington	92.0
Livingston-Livingston	89.0
Livingston-Albany	97.0
St. Tammany-Slidell	91.0
Livingston-Denham Springs	99.0

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

Source: Louisiana Office ofPublic Health, Immunization Program

B. INFECTIOUS DISEASE SURVEILLANCE

Disease Surveillance

Surveillance of infectious diseases, chronic diseases, and injuries is essential to understanding the health status of the population and planning effective prevention programs. The history of the reporting and tracking of diseases that pose a risk to public health in the United States dates back more than a century. Fifty years ago, morbidity statistics published each week were accompanied by a statement "No health department, state or local, can effectively prevent or control diseases without the knowledge of when, where, and under what condition, cases are occurring." Today, disease surveillance remains the primary tool for the gathering of information essential to controlling disease spread in the population. Achievement of the CENTERS FOR DISEASE CONTROL Healthy People 2010 Objectives depends in part on our ability to monitor and compare progress toward the objectives at the federal, state, and local levels.

Infectious disease surveillance activities are a primary function of the programs within the DEPARTMENT OF HEALTH AND HOSPITALS (DHH), OFFICE OF PUBLIC HEALTH (OPH). Many OPH programs exist to conduct disease surveillance for the state of Louisiana. A sampling of these programs includes the INFECTIOUS DISEASES EPIDEMIOLOGY PROGRAM, SEXUALLY TRANSMITTED DISEASES CONTROL PROGRAM, TUBERCULOSIS CONTROL PROGRAM, HIV/AIDS PROGRAM, and IMMUNIZATIONS PROGRAM.

Disease surveillance involves the collection of pertinent data, the tabulation and evaluation of the data, and the dissemination of the information to all who need to know. This process is a

very important aspect of public health because its purpose is the reduction of morbidity. The immediate use of surveillance is for disease control; the long-term use is to assess trends and patterns in morbidity.

Surveillance also facilitates epidemiologic and laboratory research, both by providing cases for more detailed investigation or case-control studies, and by directing which research avenues are most important. Reports of unusual clusters of diseases are often followed by an epidemiological investigation to identify and remove any common source exposure or to reduce other associated risks of transmission.

Notifiable Diseases

Reporting of notifiable diseases to the health department is the backbone of disease surveillance in Louisiana and nationally. The Sanitary Code, State of Louisiana, Chapter II, entitled "The Control of Diseases," charges the BOARD OF HEALTH to promulgate a list of diseases that are required to be reported, who is responsible for reporting, what information is required for each case of disease reported, what manner of reporting is needed, and to whom the information is reported.

Reporting of cases of communicable diseases is important in the planning and evaluation of disease prevention and control programs, in the assurance of appropriate medical therapy, and in the detection of common-source outbreaks. Surveillance data gathered through the reporting of notifiable diseases are used to document disease transmission, quantify morbidity and estimate trends, and identify risk factors for disease acquisition.

The HEALTH DEPARTMENT routinely follows-up selected diseases, either directly or through their physician or other health care provider. This follow-up is done to ensure initiation of appropriate therapy for the individual and prophylactic therapy for contacts of persons with infectious conditions. All reports are confidential.

Confidential disease reporting has been an essential element in monitoring and maintaining the health of the public in Louisiana. Through participation in disease-reporting, physicians and other health care providers are integral to ensuring that public health resources are used most effectively.

Mandatory reporting is required for a number of infectious diseases, including sexually transmitted diseases, HIV/AIDS, tuberculosis, mumps, and many others. The description of surveillance procedures for measles and rubella described later in this chapter is typical of the procedures followed for all reportable diseases.

Infectious Disease Outbreak Investigations

Infectious diseases are transmitted to others by a variety of methods: human to human via oral/fecal route (ingestion of the organism), blood exposure, respiratory route and direct person-to-person contact; vectors such as mosquitoes and ticks; and animal to human (zoonotic). In Louisiana, outbreaks have occurred from a wide variety of infectious diseases including hepatitis A, salmonella, shigella, Norwalk virus, clostridium, campylobacter, pertussis, measles and others. The most compelling reason to investigate a recognized or suspected outbreak of disease is that exposure to the source(s) of infection may be continuing; by identifying and eliminating the source of infection, OPH can prevent additional cases. For example, if cans of mushrooms containing botulinum toxin are still on store shelves or in homes or restaurants, their recall and destruction can prevent further cases of botulism. Another reason for investigating outbreaks is that the results of the investigation may lead to recommendations or strategies for preventing similar future outbreaks. Other reasons for investigating outbreaks are the opportunity to describe new diseases and learn more about known diseases; evaluate existing

prevention strategies, e.g., vaccines; teach epidemiology; and address public health concern about the outbreak.

The effectiveness of the investigation is in large part determined by how quickly and thoroughly investigative activities are initiated. Historically, all infectious disease outbreaks were initiated and managed through the OFFICE OF PUBLIC HEALTH'S INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM. Frequently, the investigations were hampered by misinformation, inappropriate specimen collection, and/or a lack of complete data. This made it difficult to determine the source of the outbreak and certainly impacted on the timeliness of disease control measures. Several years ago, the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM began a statewide intensive training of selected public health field staff that would comprise a Regional Rapid Response Team. These individuals were trained in basic epidemiologic principles, outbreak investigation methodology, computer analysis and interpretation of data, presentation of results, and selection of the appropriate disease control methods.

Each of the nine regional teams (based on the nine public health regions of the state) have three team members - usually a nurse, sanitarian, and disease intervention specialist. Each team member brings a unique set of skills/knowledge that is very important in conducting outbreak investigations. One of these individuals is selected as the Regional Rapid Response Team Coordinator for their region. This person collaborates and coordinates all investigative activities through the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM'S Rapid Response Team Coordinator and the Lead epidemiologist assigned to that specific investigation. Initial telephone conferences are held and information assessed. Activities are coordinated and supervised by the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM, and guidance and assistance provided as needed. The Regional Rapid Response Team members conduct most of the field activities, and both the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM and the regional teams analyze the data. Recommendations are provided and guidance given for instituting appropriate disease control measures. Ten outbreak investigations that occurred within 1998-1999 have involved the participation of the Regional Rapid Response Teams.

Outbreak investigations, an important and challenging component of epidemiology and public health, can help identify the source of ongoing outbreaks and prevent additional cases. Even when an outbreak is over, a thorough epidemiologic and environmental investigation often can increase our knowledge of a given disease and prevent future outbreaks. Outbreak investigations also provide epidemiologic training and foster cooperation between the clinical and public health communities.

This has been a highly successful program. Most outbreaks are handled in a timely manner with effective outcomes. Additionally, since these staff members are located in the communities, they are in a better position to identify potential outbreak situations than are staff members housed in the central office. The concept of using public health staff from different disciplines and cross training them for a common, collaborative purpose sets a precedent for similar efforts dealing with other public health issues, and reflects the agency's goal of developing a streamlined, cost effective, integrated work force. One unexpected benefit has been the increased local visibility creating positive impressions with the public and the media.

Surveillance for Measles and Rubella (German Measles)

All health care providers are required to report suspect cases of measles and rubella by phone immediately to their local public health unit. When a possible case is reported, local and statewide public health personnel are mobilized immediately to evaluate the case and to establish a rapid control effort in order to prevent the spread of the illness. All contacts are interviewed by phone or in person, and children and adults without adequate immunization are immediately vaccinated.

These diseases are highly infectious and spread rapidly. One out of every ten measles cases requires hospitalization and one out of every thousand dies. Women who are infected with rubella during pregnancy have a high likelihood of having severely deformed babies. Women of childbearing age are encouraged to receive two doses of MMR vaccine (at least one month apart) at least three months prior to becoming pregnant.

A measles outbreak was identified in Louisiana in 1995, with 17 cases identified before disease spread was stopped. The outbreak lasted 37 days. Control of the outbreak required the examination of 35 suspected cases, a total of 3,252 phone calls, the immunization of 2,527 individuals, and active investigations at 28 sites (including day care centers, hospitals, and physicians' offices).

Selected 1999 Results of Infectious Disease Surveillance

- Fifty percent of salmonellosis cases occurred in the 0 - 4 year age group.
- Two cases of typhoid fever were reported in individuals who had traveled overseas.
- Shigellosis cases decreased by 42% in 1999.
- Sixty-four percent of cases of vibrio infections reported a history of existing medical conditions.
- One case of *Vibrio Cholera 01* was reported in a 69 year old who consumed raw oysters, shrimp and crawfish and who has a history of peptic ulcer.
- While the number of hepatitis A cases increased 23% in 1999, the state rate of 4.9 per 100,000 is only about half that of the national rate of 8.6/100,000.
- The case rate of hepatitis C in Louisiana is almost 6 times higher than the national rate (7.0 vs 1.3 per 100,000).
- Males accounted for twice as many cases of hepatitis C as females.
- Louisiana's case rate for chlamydia was 53% higher than the U.S. rate (393 vs 237 per 100,000) while gonorrhea rates are more than twice the U.S. rate in 1998 (313 vs 133 per 100,000).
- Louisiana has dropped from 7th highest state in the number of AIDS cases to 10th place, a significant accomplishment.
- AIDS cases has also dropped from the 1st to the 5th leading cause of death among 25 to 44 year old men in Louisiana.
- The metro Baton Rouge area has surpassed the metro New Orleans area with respect to the AIDS case rate, as well as, the rates of newly-detected HIV cases.
- Twenty-five of the twenty-eight cases of cryptococcosis reported in 1999 occurred among those infected with HIV, as well as, 17 of 20 cryptosporidiosis reported cases.
- There were 2 lab-confirmed cases of Eastern Equine Encephalitis (EEE) in humans and 97 lab-confirmed cases in horses in 1999.
- The presence of erythema migrans was reported in only two of 15 cases of Lyme disease in 1999.

- Among the 17 cases of malaria in Louisiana residents in 1999, only 5 reported using prophylaxis during their stay abroad and three of those five reported using prophylaxis incorrectly (intermittent use or starting medication too late).
- In Louisiana, the positivity rate of animal rabies continues to be high in bats and skunks (10.5 and 18.2%, respectively) but extremely low in cats and dogs (0.5 and 0%), a trend that has continued for years.
- Males with gonorrhea were 2.6 times more likely to seroconvert on HIV testing than those with no STD diagnoses.

1998 and 1999 Disease Statistics
Please refer to the Vaccine Preventable Diseases, STDs, TB, and HIV/AIDS sections in "Chapter II: Morbidity."

Reports
The bimonthly *Louisiana Morbidity Report* and the *Epidemiology Annual Report* are published by the OFFICE OF PUBLIC HEALTH, INFECTIOUS EPIDEMIOLOGY PROGRAM. Both publications present information and statistics describing the status of reportable diseases in Louisiana.

C. SEXUALLY TRANSMITTED DISEASE (STD) AND HIV/AIDS SURVEILLANCE

Contracting a sexually transmitted disease can have serious consequences. For example, advanced (tertiary) syphilis can produce neurological, cardiovascular, and other terminal disorders, pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer, fetal and infant death, birth defects, and mental retardation.

The DEPARTMENT OF HEALTH AND HOSPITALS, through the OFFICE OF PUBLIC HEALTH'S STD CONTROL PROGRAM and the HIV/AIDS PROGRAM, conducts surveillance to determine the incidence and prevalence of STDs and HIV/AIDS, monitors STD and HIV/AIDS trends, collects data on the location and referral of persons with or suspected of having a STD for examination and early treatment, and conducts partner notification to limit the spread of the diseases.

1999 National Rankings
Nationally, Louisiana has a high ranking among the 50 states with regard to rates of sexually transmitted diseases (STDs) and HIV/AIDS.

- Primary and secondary syphilis rates in Louisiana fell from 2nd to 7th highest in the nation between 1995 and 1997. In 1998, however, the state ranking rose to 3rd highest, where it remained in 1999.
- Gonorrhea rates rose from 10th highest in the nation in 1995 to 3rd highest in 1999; chlamydia rates rose from 11th to 4th highest in the nation during the same time period. The rise in ranking for gonorrhea and chlamydia reflects an increase in the number of labs included in the state's STD surveillance system. This has resulted in the identification of cases that would not have been identified in the past.
- Louisiana's rank decreased from 7th highest in 1998 to 10th highest in 1999 among states with the highest AIDS (Acquired Immunodeficiency Syndrome) rates. Among United States metropolitan areas, New Orleans ranked 14th and Baton Rouge ranked 12th highest.

1999 and 2000 Disease Statistics
Please refer to the STDs and HIV/AIDS sections in "Chapter II: Morbidity."

Reports
The STD CONTROL PROGRAM and the HIV/AIDS PROGRAM maintain program databases, and generate specific reports and analyses by cause, location, and demographic factors for individuals, communities, and agencies. The HIV/AIDS PROGRAM also publishes the *HIV/AIDS Annual Report*, monthly reports and nine annual regional reports which are available to the public.

D. TUBERCULOSIS SURVEILLANCE

The Louisiana OFFICE OF PUBLIC HEALTH TB CONTROL PROGRAM conducts active surveillance for tuberculosis in the state. Regional staff interact with area physicians, hospitals, and laboratories in the course of their duties. All known or suspected cases of tuberculosis are investigated to assure that transmission of tuberculosis is contained.

Currently, TB Control in Louisiana is working with CDC to enhance surveillance activities. Improved methodology is being implemented to facilitate reporting and tracking.

1999-2000 Disease Statistics
Please refer to the Tuberculosis section in "Chapter II: Morbidity."

E. ALCOHOL & DRUG ABUSE PROGRAM: INTRAVENOUS DRUG USE TREATMENT AND STD, TB, AND HIV/AIDS SCREENING

National statistics show that more than 70 conditions requiring hospitalization, most notably cancer, heart diseases, and HIV/AIDS, have risk factors associated with substance abuse, and $1 of every $5 Medicaid spends on hospital care is attributable to substance abuse (DEPARTMENT OF HEALTH AND HUMAN SERVICES, 1997 Fact Sheet). The same report shows that injecting drug use is the primary model of transmission of HIV among women and is responsible for 71% of AIDS cases among women. The lifetime cost of taking care of one AIDS patient is approximately $85,000.The SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION estimates that over 5 million persons in the U.S. were in need of treatment for severe drug abuse problems in 1998. Almost 60% of these people, an estimated 2.9 million, have not received treatment for their addiction. The size of this treatment gap has remained relatively unchanged over the past 8 years, ranging from 54% to 68% (CSAT by Fax, August 30, 2000, Vol. 5, Issue 13][1]

As part of the Louisiana's State Demand Need Assessment Studies the OFFICE FOR ADDICTIVE DISORDERS (OAD) collaborated with the Research Triangle Institute, North Carolina, and L.S.U. Medical Center, New Orleans, an published an Integrated Population Estimates of Substance Abuse Treatment Needs Study, August 1999. This work was supported by the CENTER FOR SUBSTANCE ABUSE TREATMENT (CSAT). The study shows that 10.2% of Louisiana adults, or 318,857 persons, were found to be in need of substance abuse treatment. The region with the greatest number of persons needing services was Region 1 (Orleans, Plaquemine and St. Bernard parishes). The region with the fewest number of individual needing treatment was Region 6 (Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides and Vernon parishes).

[1] CSAT by Fax is a bi-weekly publication produced and distributed by facsimile under the Knowledge Application Program (KAP], US Department of Health and Human Services.

Epidemiology

The Community Epidemiology Work Group (CEWG) is a national network of epidemiologist and researchers that meets twice a year to discuss current and emerging substance abuse problems. A CESAR[2] Report (September 4, 2000, Vol. 9, Issue 35] highlighting proceedings from the 48th CEWG meeting, held in Baltimore, Maryland, in June 2000 shows the following trends:

Ecstasy (MDMA) appears to be increasing in the 21 CEWG areas. Additional data (CESAR, September 18, 2000, vol. 9, Issue 37] indicates "The percentage of high school seniors reporting that Ecstasy was "fairly easy" or "very easy" to obtain increased from 22% in 1989 to 40% in 1999, according to the data from the Monitoring the Future high school survey. These findings support recent reports that Ecstasy, traditionally associated with clubs and rave parties, is becoming more acceptable to other main stream populations.

Marijuana indicators, which have increased dramatically over the past decade, stabilized in 17 of the 21 CEWG areas. However, marijuana abuse remains a serious problem.

Methamphetamines use continues to decline since 1999 in the CEWG areas. Cocaine Indicators continue to decrease or remain stable in the majority of the CEWG areas.

Key findings issued by the Louisiana State Epidemiology Work Group (LAEWG] in their May 1998 Proceedings show a decline in admissions by primary drug of abuse across the 10 parishes for Cocaine, Alcohol and Methamphetamine. Increases in admissions were recorded for Marijuana, Heroin and "Other Drugs".

The State of Louisiana Communities that Care Youth Survey (CTC): Student Use of Alcohol, Cigarettes, Marijuana and Inhalants

According to a Communities that Care (CTC) Youth Survey (6th, 8th, 10th, and 12th grades) published in May, 1999, the substances that are the most commonly used by Louisiana's students - alcohol, tobacco, marijuana and inhalants - are used at levels that are similar to current national levels.

Alcohol is the most widely used substance. The lifetime prevalence rate for alcohol rises from 28% in 6th grade to 79% in 7th grade. Combining all grade levels, slightly more than half (55%] of all students have used alcohol sometime in their lifetimes. Nearly one third (32%) of Louisiana students reported using alcohol in the past 30 days.

Tobacco (cigarettes and chewing tobacco] is the next most commonly used substance among Louisiana students. Lifetime prevalence of cigarette use in Louisiana ranges from 27% in the 6th grade to 33% in the 12th grade; 32% of students reported using cigarettes in the past 30 days. Overall, 49% of Louisiana students have used cigarettes sometime in their lifetime.

Marijuana use has risen over the last six years for middle and high school students. In their lifetime, about 22% of Louisiana students have used marijuana, with lifetime use rising from 4% in the 6th grade to 42% in the 12th grade. Thirty-day use of marijuana was 10% across all grades, with 2% of 6th graders reporting use in the past 30 days and 18% of 12th graders reporting use.

[2] CESAR by Fax is a weekly publication produced and distributed by facsimile under the Governor's Office of Crime Control & Prevention.

Intravenous Drug Users Treatment

OFFICE FOR ADDICTIVE DISORDERS' policy gives Intravenous Drug Users (IDUs) statewide priority admission status to programs (contract and state) and treatment modalities. Block grant requirements mandate that IDUs be admitted to treatment programs within 14 days after request for admission, and be provided with interim services within 48 hours if comprehensive care cannot be made available upon initial contact, with a waiting period of no longer than 120 days. OAD offers outreach services statewide using the Indigenous or Behavioral Model, or other outreach models. Activities include: education, prevention, condom distribution, clean needle demonstrations, medical evaluations and referrals.

STD, TB, And HIV/AIDS Screening

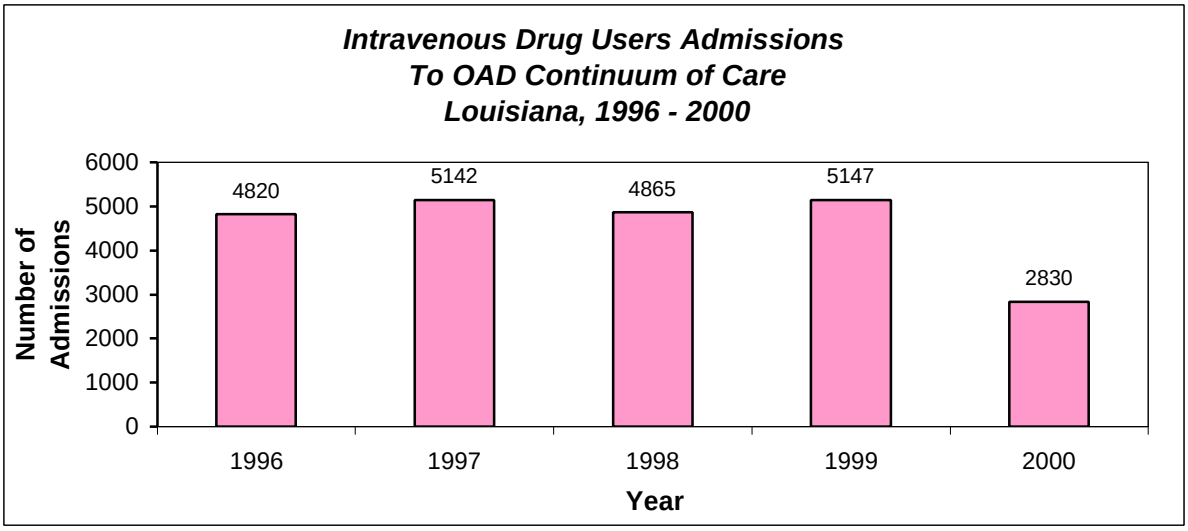
In addition to treatment of addiction problems, OAD makes available sexually transmitted disease (STD), tuberculosis (TB), and HIV testing to each individual receiving treatment. Testing is offered, either directly or through arrangements with other public or nonprofit private entities, through a Qualified Service Organization Agreement (QSOA) and a Memorandum of Understanding (MOU) between the OFFICE OF PUBLIC HEALTH and OAD. This system includes the provision of the necessary supplies by the OFFICE OF PUBLIC HEALTH'S STD CONTROL, TB CONTROL, and HIV/AIDS PROGRAMS for on-site STD, TB, and HIV testing of OAD clients. Early intervention services include screening testing and pre- and post-test counseling. Individuals testing positive are referred to the OFFICE OF PUBLIC HEALTH Outpatient Clinics for further evaluation and appropriate testing. Upon a client being identified as an HIV patient in our system, he or she is referred to the local consortium and/or directly to the Charity Hospital outpatient clinics, under the auspices of the OFFICE OF PUBLIC HEALTH. Besides referrals to public agencies, clients can be referred to other HIV supportive services that are available in the community. OAD utilizes this referral network to access additional services for substance abuse clients diagnosed with HIV/AIDS. The Office has established a working relationship with the referral entities and is able to monitor the needs of clients who have been referred. OAD also provides ongoing counseling to its clients regarding HIV prevention and treatment, self-help groups, and information and referral services.

OAD participates on the Statewide HIV Community Planning Group (SCPG) and two subcommittees at the regional level: Nominations and Special Needs. The goal of the statewide group for SFY 2000 is 1) submit a plan of action to CDC for state prevention; 2) recruit new members for both committees; 3) identify at risk areas within the region that need HIV prevention planning; and 4) identify at risk populations to apply to the prevention plan. Groups identified for SFY 2000 are racial and ethnic minority groups, sexually active females, men who have sex with men, youth and substance abusers. Interventions utilized were street outreach, counseling and testing, and condom availability. The committees include individuals with expertise in education, substance abuse, health, and public health; special populations with representatives from each region (who generally represent at-risk communities); and representatives from the DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, EDUCATION, and OAD. The regional CPG meets monthly and the statewide committee meets quarterly.

1999-2000 Program Statistics

Intravenous Drug Users (IDUs)

OAD Management Information System reports that there were 2,830 intravenous drug user (IDUs) admissions to the OAD continuum of care during SFY 2000, (9% of the total admissions), 5,147 during 1999 (17% of the total admissions) 4,865 during 1998 (18% of the total admissions), 5,142 admissions during SFY 1997 (20% of the total admissions) and 4,820 admissions for SFY 1996 (19% of the total admissions). Figures for SFY 2000 are significantly lower than prior years.

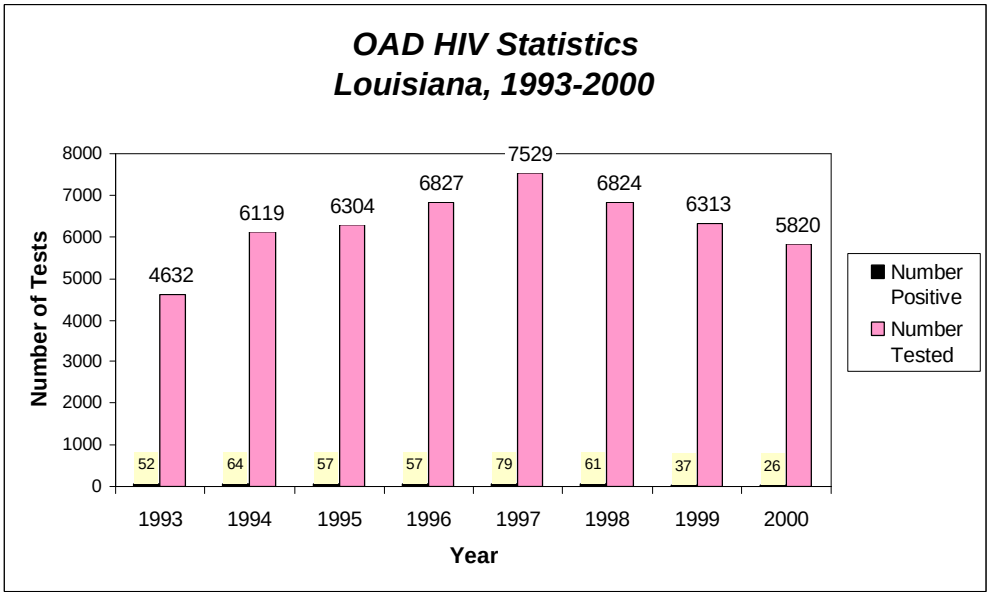


Source: Office for Addictive Disorders

HIV/AIDS

In SFY 1999 Louisiana had an incidence of 18 HIV cases per 100,000 population, and because of this, Louisiana is a designated state for the purposes of block grant expenditure for HIV services (minimum of 5% of the total award).

The OFFICE OF PUBLIC HEALTH'S (OPH) summary of statistics for calendar year 2000 shows that 5,820 HIV tests were conducted at OAD sites. Of this population, 26 test were positive (<1%]. OAD sites performed approximately 9.8% of the total HIV testing done in the state in 2000. During 1997, OPH tested 7,529 OAD clients for HIV and obtained 79 (1%) positive results.



Source: Office for Addictive Disorders

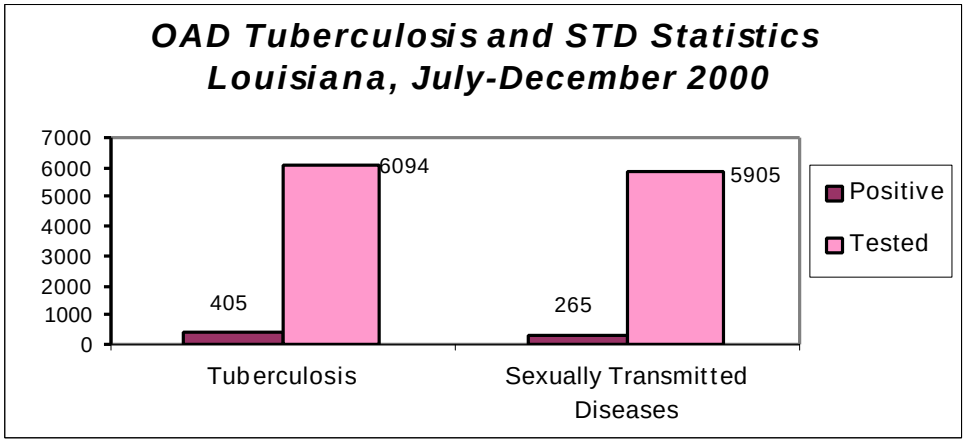
OPH data for the 1998 calendar year indicate that 6,824 OAD clients were tested for HIV, and 61 (1%) were found to be HIV positive. OPH data for calendar year 1999 show approximately 6,313 clients from OAD clinics were tested for HIV, with 37 (<1%) clients having positive test results. There have been no significant changes in positive results trends since 1992. OAD provided 5,191 services to addicted population during SFY 2000.

Tuberculosis

For the first half of SFY of 2001 6,094 tuberculosis tests were conducted, and 405 positive results were obtained. This represents 7% of clients tested (OAD Set Aside Quarterly Reports]. OAD Management Information System reports 9,117 services provided to TB infected clients during SFY 2000.

STDs

A total of 5,905 Sexually Transmitted Disease (STD] tests were conducted during the first half of SFY 2001. Positive results were found in 265 clients. This represents 4% of clients tested (OAD Quarterly Set Aside Reports]. OAD Management Information System reports 5,442 services to STDs infected clients for SFY 2000.



Source: Office for Addictive Disorders

F. STATEWIDE CHILD DEATH REVIEW PANEL

State legislation mandates a Statewide Child Death Review Panel, staffed by the OFFICE OF PUBLIC HEALTH'S INJURY RESEARCH AND PREVENTION SECTION and composed of a multi-disciplinary group of other professionals. The Panel mandate requires the review of records for all unexpected deaths of children under age fourteen. The INJURY RESEARCH AND PREVENTION SECTION identifies these records by searching the mortality files. The Panel is to assure that proper investigation, follow-up, and prevention programs to limit or prevent such deaths are in place.

The INJURY RESEARCH PROGRAM has worked with other Panel members to establish similar Panels in the larger communities of the state. These local panels can perform reviews more promptly and facilitate the translation of investigative findings into community activities to reduce these unexpected deaths.

Reports
The Statewide Child Death Review Panel prepares a mandated *Annual Report* to the Legislature, which is available to the public through the INJURY RESEARCH AND PREVENTION SECTION

G. BRAIN AND SPINAL CORD INJURY REGISTRY

The legislatively mandated Registry of Brain and Spinal Cord Injuries is maintained within the INJURY RESEARCH AND PREVENTION SECTION. Injuries followed through the registry are classified as "Reportable Conditions". The Injury Program works with the mandated reporters, mostly hospitals, to build this Registry. The INJURY RESEARCH AND PREVENTION PROGRAM further reviews death certificates so that fatal cases are not missed. Brain and spinal cord injuries can be exceptionally devastating and costly. With assistance from Louisiana hospital emergency room staff, details surrounding the injury are extracted and used to provide information on leading causes, highest risk groups, and recognized special needs so that interventions and services can be identified. Examples of prevention programs generated from these data include prevention of falls from deer stands, safe tackling practices for high school football players, and recommendations to make junior rodeo riding safer.

1998 Statistics
Please refer to the Brain and Spinal Cord Injury Registry section in "Chapter 1: Morbidity" for a graphic representation of the INJURY RESEARCH AND PREVENTION PROGRAM'S Traumatic Brain Injury data.

Reports
OPH's INJURY RESEARCH AND PREVENTION SECTION produces an extensive *Annual Report*, available to the public, describing these injuries.

H. INJURY SPECIFIC DEATHS DATABASE

The Injury Research and Prevention Program has created and maintains the Injury-Specific Deaths Database from mortality files dating back to nineteen eight-six (1986). This special Database organizes death certificate information on all injury-related deaths in the State. This information is used to examine trends in the occurrence of specific injuries or groups of injuries, and to identify and track the injury experiences of different risk groups. It provides important data for planning and evaluation of interventions, as well as the identification of emerging problems. Due to the change to ICD 10 standards for identifying cause of deaths, there will be a brief delay in extracting the most recent mortality data.

Reports
The INJURY RESEARCH AND PREVENTION SECTION maintains this database and can generate specific reports and analyses by cause, location, and a variety of demographic factors upon request for individuals, communities, or agencies.

I. BURN INJURIES

Hospitals are required by legislation to report severe burn injuries to the OFFICE OF THE STATE FIRE MARSHAL to assist in the identification of arsonists. The INJURY RESEARCH AND PREVENTION SECTION entered into a partnership with the State Fire Marshall to provide a broader analysis of data that describe patterns of burn injuries in Louisiana. Aggregation of these data, along with burn injury death data, will allow the INJURY RESEARCH AND PREVENTION SECTION to better describe the circumstances leading up to fatal and non-fatal burn injuries. Development of burn injury prevention initiatives can be based on these findings.

Reports
The INJURY RESEARCH AND PREVENTION SECTION maintains this database and can generate reports upon request.

J. LOUISIANA ADOLESCENT HEALTH INITIATIVE

There was a strong desire among policy-makers at the DHH, OFFICE OF PUBLIC HEALTH to increase efforts to adequately address the complex social, emotional and medical needs of the under-served adolescent population. The result was the September 1995 launching of the Louisiana Adolescent Health Initiative (AHI). AHI facilitates a coordinated, multi-disciplinary approach to adolescent health care, disease prevention and health promotion in the state. The goal of the Initiative is to provide Louisiana adolescents with the opportunity to prosper in a healthy, nurturing and safe environment. The Initiative is reaching this goal by increasing coordination and collaboration between internal programs and external agencies, by infusing adolescent voices in planning and policy-making efforts of the state and by providing an infrastructure that enables local communities to more effectively and efficiently address adolescent health needs.

The collection of data and dissemination of information is an essential part of the Adolescent Health Initiative. Providing information on both adolescent health issues and on current adolescent health activities is a priority! The state public health office serves as a synthesizer and central repository for such information. The use of statewide teen health questionnaires and statewide adolescent focus groups, coupled with the collection of adolescent health statistics, provides parents, communities, politicians and policy makers with a clear picture of adolescent health in Louisiana.

Currently, there are many state and local projects that emphasize different aspects of adolescent health. Some focus on teenage pregnancy or teen parenting, while others focus on HIV/AIDS, tobacco control, conflict resolution, cardiovascular health, or on the maintenance of school-based health clinics. The Initiative allows for the planning, development, implementation and evaluation of these activities in a coordinated, collaborative fashion. In addition, it broadens the scope of cooperation to include the DHH OFFICES OF MENTAL HEALTH and ALCOHOL AND DRUG ABUSE, the OFFICE OF YOUTH SERVICES, and others. Such team-building efforts are necessary to merge the work of all agencies working with the common goal to ensure health & happiness for all LA's youth.

Results

Activities to date include:

- Produced and distributed the first edition of the *LA Adolescent Data Book,* which includes a statistical compilation of adolescent health indicator data
- Produced and distributed the *2000 LA Teen Pregnancy Prevention Directory,* which includes a listing of statewide programs that provide counseling and medical services to help teens prevent pregnancy
- Produced and distributed the *2000 Louisiana Adolescent Health Fact Sheet* , which
- presents an accurate description of the health status of Louisiana adolescents
- Planned and coordinated the 2000 Safe Summer Youth Rally and the 2000 Adolescent Pregnancy Prevention-Parent Summit
- Administered quarterly statewide Adolescent Health Initiative Steering Committee Meetings
- Increased coordination with both internal DHH, OPH programs, and external agencies involved in public health, public policy and social welfare
- Collaborated with other state and national adolescent projects (National Campaign to Prevent Teen Pregnancy)
- Provided technical assistance to local, statewide and national adolescent health coalitions that are performing comprehensive adolescent activities (Let's Talk Month Activities)
- Served as an Adolescent Specialist on many statewide Adolescent Task Force's
- Administered the Teen Talk 2000 Focus Group Project to nearly 300 Louisiana youth in all nine OPH Administrative Regions
- Gave AHI Presentations at national (i.e., Healthy People 2010), statewide and local conferences
- Placed AHI highlights in four Louisiana newspapers and national newsletters

K. LaPRAMS

Overview

The Louisiana Pregnancy Risk Assessment Monitoring System (LaPRAMS) is an on-going, population-based surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. It is a joint effort between the OFFICE OF PUBLIC HEALTH and the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC). The CDC, OPH VITAL RECORDS REGISTRY and STATE CENTER FOR HEALTH STATISTICS, and TULANE SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE provide technical assistance to LaPRAMS. The CDC, along with the OPH FAMILY PLANNING and MATERNAL AND CHILD HEALTH programs, provide funding for the project.

LaPRAMS data are collected from a representative random sample of new mothers by means of mail surveys and telephone interviews. Louisiana women who have had a recent live birth are randomly selected to participate in LaPRAMS. Since data collection was initiated in 1997, 7,404 women have received the LaPRAMS questionnaire. In 1998, 2,421 women were

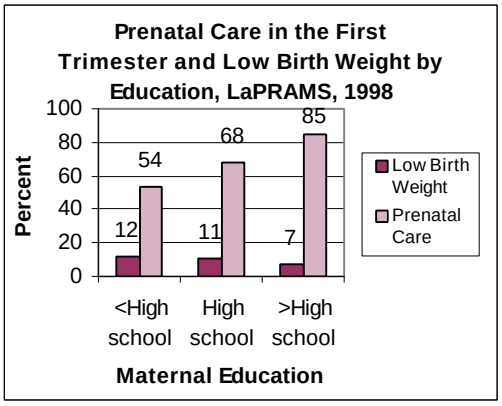
selected to receive the questionnaire. Over 73% of the women selected in 1998 completed the survey for 1998 births (full year data). The average response rate for 1997-1998 was approximately 72%, a response rate that currently is maintained. Since LaPRAMS is based on a representative sample, the data collected by this survey represents information that is generalizable to the whole state of Louisiana.

Information provided by LaPRAMS includes: medical and physical factors, socioeconomic status, prenatal maternal experiences and behaviors (cigarette smoking, alcohol use, and physical abuse), prenatal care counseling, use and barriers to prenatal care, content and quality of care, complications during pregnancy, birth control use before and after pregnancy, sources of prenatal care and payment of delivery, and postpartum maternal experiences and behaviors.

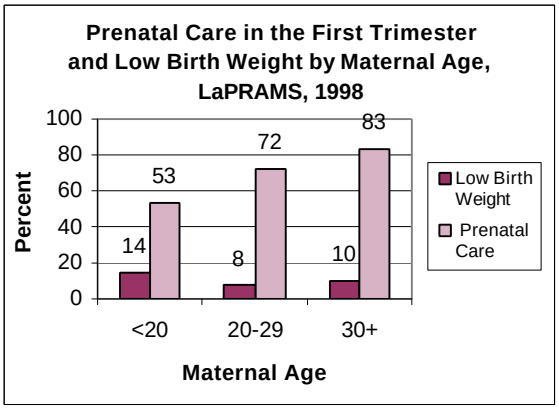
Results

The following findings are based on LaPRAMS 1998 data.

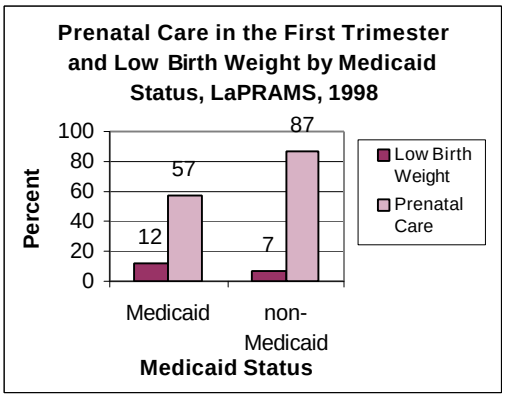
- ***Low birth weight and intensive care.*** Ten percent of births in Louisiana are low birth weight (below 2500 grams). The *Healthy People 2010* target is 5%. Fifty-one percent of low birth weight infants were admitted to an Intensive Care Unit.
- ***Early initiation of prenatal care.*** Seventy-two percent of women reported initiation of prenatal care during the first trimester of their pregnancy. The *Healthy People 2010* target for initiation of prenatal care in the first trimester is 90%. Socio-demographic factors associated with initiation of prenatal care in the first trimester are shown below.



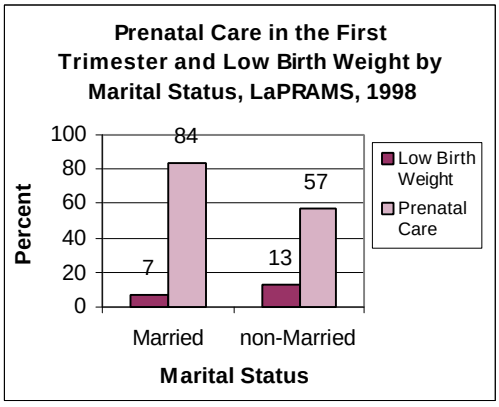
Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS

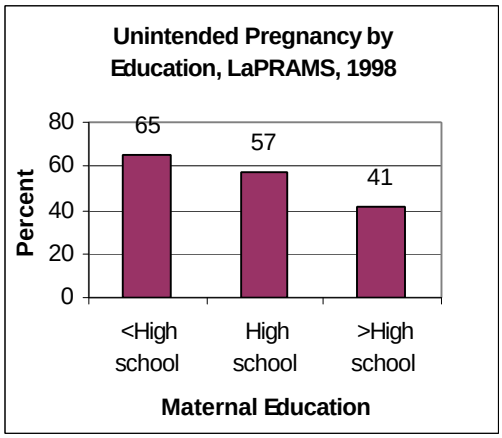


Source: Office of Public Health, LaPRAMS

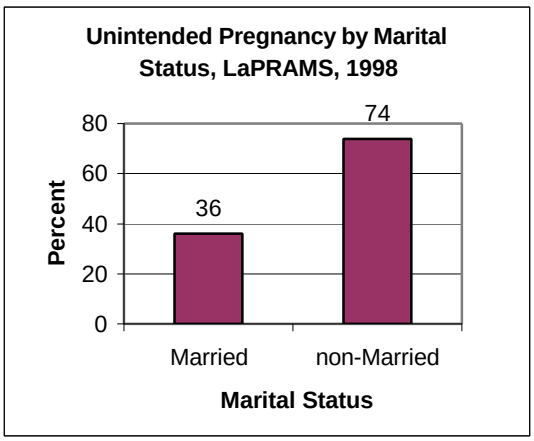


Source: Office of Public Health, LaPRAMS

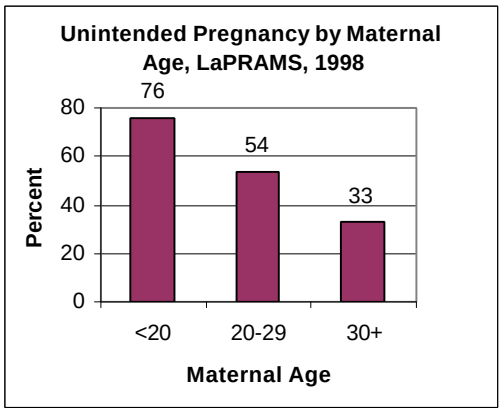
- ***Unintended pregnancies*:** Fifty-three percent of women reported that their pregnancies were unintended. Unintended refers to the timing of the pregnancy, i.e. whether the woman desired the pregnancy to be at some time in the future or not at all. The *Healthy People 2010* target for unintended pregnancies is 30%. Socio-demographic factors associated with unintended pregnancies are shown below.
- ***Birth control use:*** Over 25% of women surveyed were using birth control when they became pregnant. 74% of women reported that they were not using birth control when they became pregnant. Reasons for not using birth control include wanting to become pregnant, the side effects of the birth control methods, not anticipating sex, thinking that they were infertile and just not wanting to use birth control. Socio-demographic factors associated with birth control use are shown below.



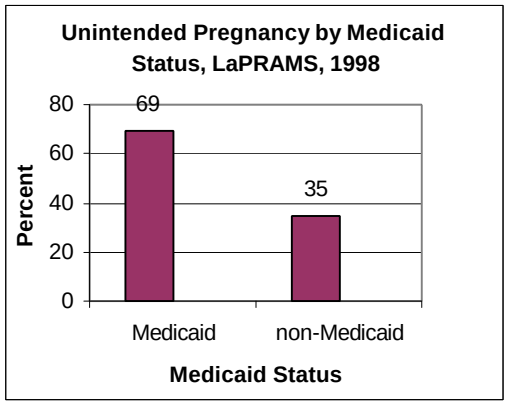
Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS

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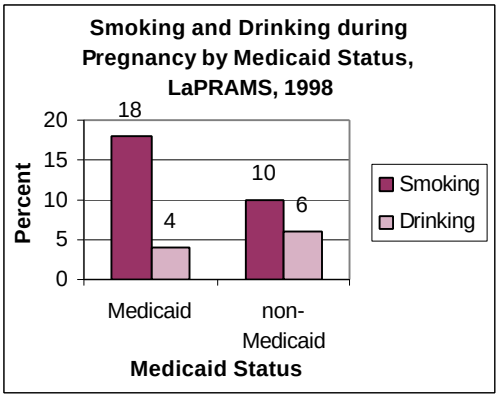
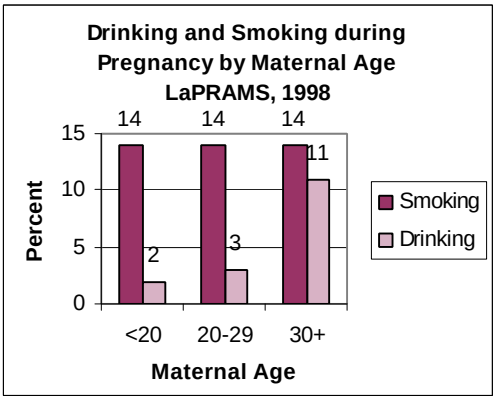
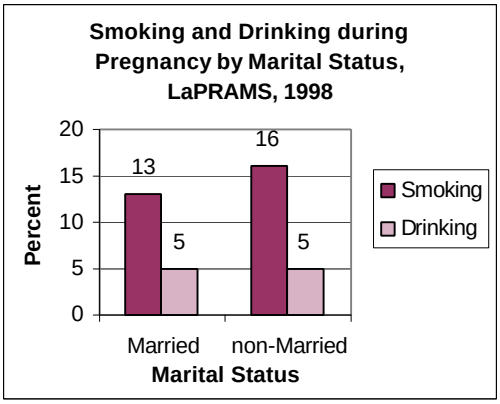
- ***Cigarette smoking before, during, and after pregnancy:*** In the three months prior to pregnancy, 35% of women reported that they had smoked. The percentage decreased during pregnancy to 14% but increased to 21% at 3-6 months after delivery, a level slightly lower than the pre-pregnancy rate. The *Healthy People 2010* target for women, in general, is 15% and is 1% for pregnant women.
- ***Alcohol consumption before and during pregnancy:*** Forty-three percent of women reported that they drank alcohol during the three months before pregnancy, and 5% reported that they drank alcohol during the last trimester of their pregnancy. The *Healthy People 2010* target for pregnant women is 6%.



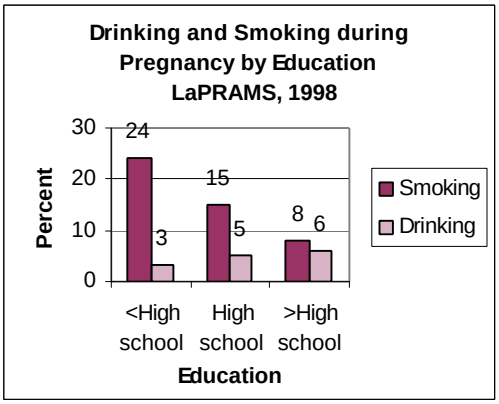
Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS

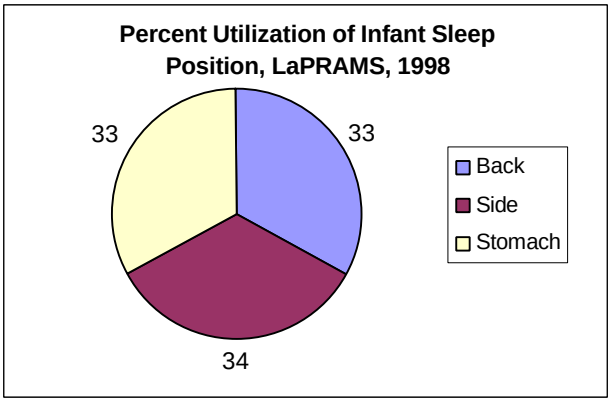


Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS

- ***Infant sleep position***: Among women surveyed, 33% placed the baby on its back, 34% placed the baby on its side, and 33% placed the baby on its stomach. Research shows that placing a baby on the back to sleep reduces the risk of Sudden Infant Death Syndrome (SIDS).



Source: Office of Public Health, LaPRAMS

- ***WIC participation***: Fifty-five percent of women reported being on WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children) during their pregnancy.
- ***Breastfeeding***: Forty-three percent of women breastfed their infants beyond one week. Those who breastfed beyond one month dropped to 31%. The *Healthy People 2010* target for breastfeeding during the early postpartum period is 75%. Socio-economic factors, such as maternal age, maternal education, marital status and Medicaid status, were associated with breastfeeding beyond the first week. Mothers over 30 years of age, mothers with more than a high school education, married mothers and non-Medicaid mothers were most likely to breastfeed their infants beyond the first week. Among mothers less than 20 years of age, 22% breastfed their infants. Nineteen percent of mothers with less than a high school education breastfed beyond the first week. Twenty-six percent of unmarried mothers breastfed their infants and 29% of mothers on Medicaid breastfed beyond the first week.

Data from LaPRAMS will be used to supplement information from vital records and to generate information for planning and assessing perinatal health programs around the state. Findings from the data will also be used to develop programs designed to identify high-risk pregnancies. In addition, LaPRAMS data will enhance the understanding of maternal behaviors and the relationship between these behaviors and adverse pregnancy outcomes, such as low birth weight and infant mortality.

The LaPRAMS 1999 data analysis phase was recently initiated. During 2001, LaPRAMS data will be used to measure federal block grant performance indicators for both MATERNAL AND CHILD HEALTH and FAMILY PLANNING. A 1999 surveillance report will be provided to OPH program staff at the beginning of this year. This report will present OPH program administrators an important fundamental overview of maternal behaviors and experiences in Louisiana. It also will afford OPH programs the opportunity to identify future LaPRAMS analyses tailored to supply more detailed health information.

L. ORAL HEALTH ASSESSMENT

The effects of poor oral health can greatly impact the overall health of an individual. Poor oral health in children can have far-reaching results, including infection, absence from school, and malnutrition. The ORAL HEALTH PROGRAM OF THE OFFICE OF PUBLIC HEALTH, MATERNAL AND CHILD HEALTH PROGRAM, is charged with monitoring the oral health status of Louisiana's children.

Comprehensive Oral Health Needs Assessment

The ORAL HEALTH PROGRAM has several ongoing initiatives, one of which is a Comprehensive Oral Health Needs Assessment among Louisiana's children. This needs assessment uses data for successive years, gathered from two sources: survey data collected by the ORAL HEALTH PROGRAM and dental Medicaid claims data.

A study in which school health nurses screened third-grade children throughout the state showed that 38% of the children had untreated caries. The prevalence of dental sealants among the children was 22%, well below the national objective of 50%. Of the 1435 children screened, 532 (37%) required referral to a dentist, strongly demonstrating the need of this population for dental care.

A study of Louisiana Medicaid data by the Centers for Disease Control, published in the September 3, 1999, issue of the *Morbidity and Mortality Weekly Report* , showed that the average treatment costs for Medicaid-eligible children living in non-fluoridated areas were twice as high as the average treatment costs for Medicaid-eligible children living in fluoridated areas. The study also showed that Medicaid-eligible children living in non-fluoridated areas were three times as likely as Medicaid-eligible children living in fluoridated areas to receive dental treatment in a hospital operating room.

The number of water systems adjusting fluoride content decreased from 73 in 1986 to 45 in 1998, and the percentage of the population of the state receiving optimally-fluoridated water decreased from 54% in 1986 to only 49% in 1998. This trend is away from the national objective of 75% of the population receiving optimally-fluoridated water.

M. ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY

Louisiana ranks among the top states in the United States in the per capita production of hazardous wastes and in the amount of chemicals released into its water, air, and soil.

The OFFICE OF PUBLIC HEALTH, SECTION OF ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY (SEET) promotes the reduction in disease morbidity and mortality related to human exposure to chemical contamination within the state of Louisiana. SEET oversees and responds to public health needs with regard to environmental health issues.

In recent years, there has been an increase in public awareness of the acute and chronic health effects of chemicals in the environment and a greater demand for SEET to investigate these effects. SEET attempts to address residents' concerns by:

- Identifying toxic chemicals in the environment that are likely to cause health effects
- Evaluating the extent of human exposure to these chemicals and the adverse health effects caused by these exposures

- Making recommendations for the prevention/reduction of exposure to toxic chemicals and the adverse health effects caused by these exposures
- Promoting a better public understanding of the health effects of chemicals in the environment and of the ways to prevent exposure.

Activities conducted by SEET include:

Epidemiological and Toxicological Investigations

- Public Health Assessments and Consultations (Toxic Site Assessments)
- Pesticide Exposures
- Disease Cluster Response
- Cancer Mortality Trend Analysis
- Mercury Blood Screening

Environmental Health Advisories (See "Chapter IV: Preventive Health Outreach Programs.")

- Mercury in Fish

Environmental Health Education (See "Chapter IV: Preventive Health Outreach Programs.")

- Health Effects Related to Pesticide Exposure
- Mercury in Fish
- Health Professional Education
- Public Health Response for Chemical Spills

The projects described below in more detail are representative of those coordinated by SEET.

Public Health Assessments and Consultations
Health Assessors complete extensive Public Health Assessments or shorter Health Consultations for Superfund and other hazardous waste sites in Louisiana. The Public Health Assessment is an evaluation of all relevant environmental information, health outcome data, and community concerns around a hazardous waste site. It identifies populations potentially at risk and offers recommendations to mitigate exposures. A Health Consultation is a response to a request for information and provides advice on specific public health issues that could occur as a result of human exposure to hazardous materials. Based on the above documents, health studies, environmental remediation, health education, exposure investigation, or further research may be recommended.

As of June 30, 2000, there are currently 114 confirmed and 568 potential inactive and abandoned hazardous waste sites in Louisiana, according to the DEPARTMENT OF ENVIRONMENTAL QUALITY. SEET is evaluating the public health impact of 28 of these sites. Details concerning these activities can be obtained from SEET. SEET also (1) develops fact sheets and other handouts to help inform the local community about health issues around hazardous waste sites, (2) responds to an individual's request for toxicological and medical

information, and (3) makes presentations in public meetings and availability sessions around the state.

Central Wood Preserving (CWP)

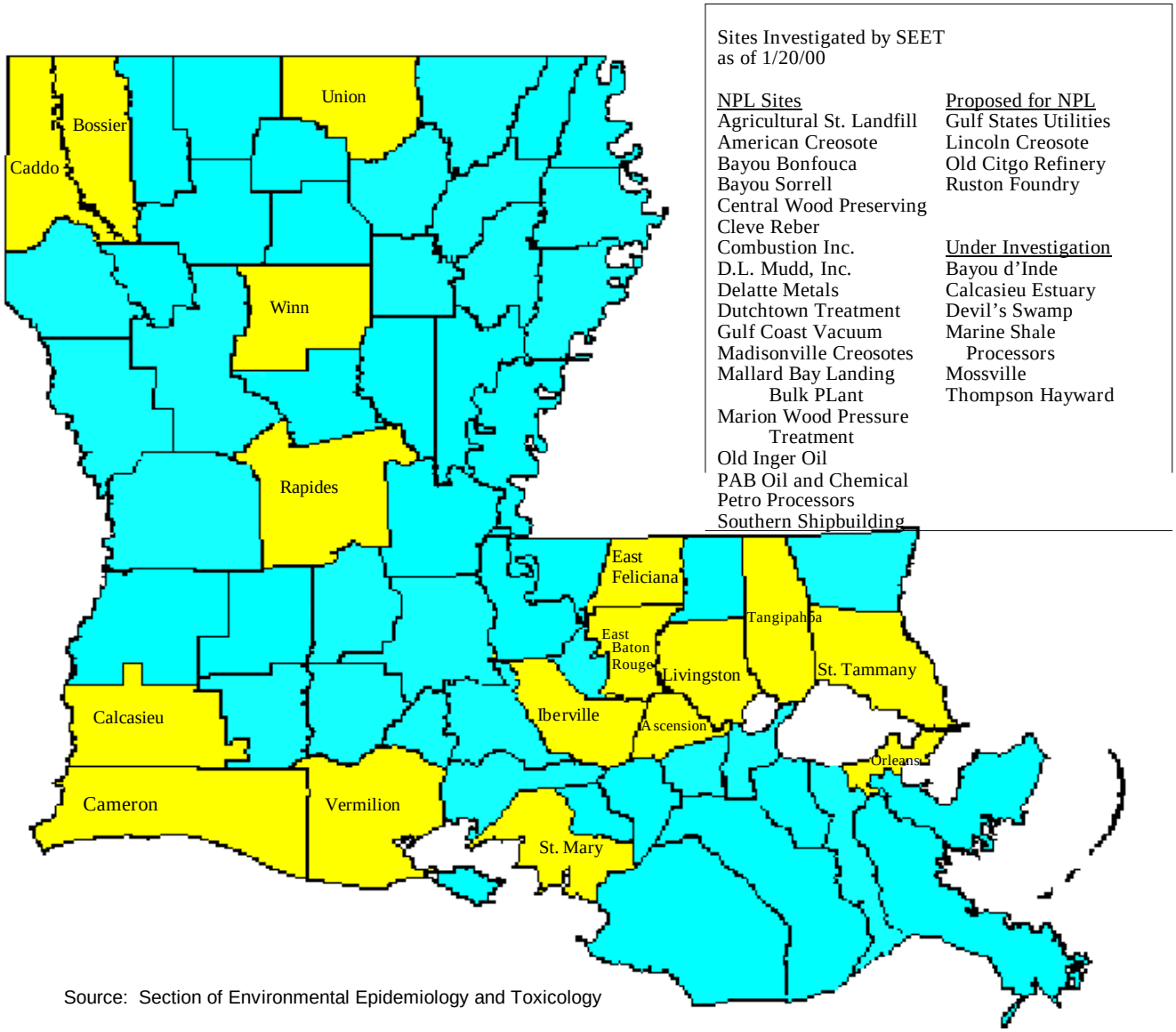
The 12-acre CWP site is a former wood treating facility located in the city of Slaughter, East Feliciana Parish, Louisiana. The site operated from 1950 to 1991 and used creosote or Wolman Wood Preservative, a solution of cooper, chromium, and arsenic salts, as wood preserving agents. The CWP site contaminants of concern include arsenic, chromium, copper, and polycyclic aromatic hydrocarbons (PAHs). This site was placed on the Environmental Protection Agencies (EPA) National Priorities List (NPL) in 1999.

The CWP site is bordered by wetlands to the north and south, residential property to the northwest and northeast, and a creek and associated wetland to the east- southeast. Surface waters from the former facility operations area drain into these wetlands.

Currently, soil exposure is the primary on-site pathway of concern due to the public accessibility to a portion of the site and the known elevated levels of arsenic, chromium, copper, and PAHs. The levels of contaminants present in the on-site soils at the CWP site represents a public health hazard. Soil and sediment exposure is also the primary off-site pathway of concern due to elevated levels of arsenic.

In July 2000, SEET staff administered a Needs Assessment (NA) to approximately 10 homes adjacent to the CWP site. The heads-of-household were asked about their health problems and about the health conditions of other household members. There were 30 health conditions reported by adults (over 18 years of age). No health problems were reported by 73.3% of the adult population. Health concerns reported for children were allergies, anemia, and chicken pox. The heads-of-household were also asked about their other environmental health concerns. Seven, both males and females, reported having no concerns. The other concern expressed was allergies. Follow-up to the community will be in the form of a mail out of the Executive Summary of the Needs Assessment to the 10 households.

Louisiana Parishes with Superfund and Selected Hazardous Waste Sites



Source: Section of Environmental Epidemiology and Toxicology

Pesticide Exposures

Health-Related Pesticide Incident Report Program

The Health-Related Pesticide Incident Report (HRPIR) Program is a complaint-based, statewide program designed to investigate and evaluate adverse health effects related to acute pesticide exposure. The Louisiana Department of Agriculture and Forestry (LDAF) and SEET jointly investigates complaints. Investigations involve the collection and review of environmental and health data relevant to the exposure incident. Data are reviewed to determine short-term and long-term health effects related to the pesticide exposure. A written summary of the findings is provided to the complainant.

Cases are classified using criteria that consider the plausibility of reported health effects based on the known toxicology of the pesticide(s) involved.

Case Classification Categories:

- Confirmed—Health effects confirmed as being related to pesticide exposure.
- Likely—Health effects likely related to pesticide exposure.
- Possible—Health effects possibly related to pesticide exposure.
- Unlikely—Health effects unlikely related to pesticide exposure.
- Not Pesticide-Related—Health effects not related to pesticide exposure, or there is insufficient evidence to determine the cause of health effects.
- No Symptoms Reported—No symptoms were reported related to pesticide exposure.

1999-2000 Health-Related Pesticide Incident Reports

There were 37 health-related pesticide incidents involving 119 cases reported to LDAF and SEET from 0ctober 1999 through September 2000. As of January 31, 2001, 20 incidents involving 55 cases have been investigated and closed. Classification of the 55 cases include 2 'confirmed,' 8 'likely,' 41 'possible,' 2 'not pesticide-related,' and 2 'no symptoms reported.' Most cases experienced mild (N=34) or moderate (N=19) symptoms.

Analysis of the 20 closed incident investigations indicate that most pesticide exposures occurred in a residential location (N=13), and the majority of exposure incidents resulted from the drift of an aerial application of a pesticide (N=11). Ten incidents involved exposure to an insecticide, and 7 incidents involved herbicide exposure.

Louisiana's Registry of Pesticide Hypersensitive Individuals

In 1989, the Louisiana Department of Agriculture and Forestry and SEET established the Registry of Pesticide Hypersensitive Individuals. The registry's purpose is to enable hypersensitive individuals to receive prior notification of pesticide applications in the vicinity of their home. With prior notification, individuals can take necessary precautions to protect themselves from inadvertent pesticide exposure. There is no charge for inclusion on the registry although a physician must certify that the registrant is hypersensitive to pesticides.

The registry, which is updated annually, is provided to all licensed applicators and pest control operators (PCOs). Applicators and PCOs are requested to notify registrants prior to making a pesticide application to a property within one hundred feet or adjacent to the registrant's property. Notification by applicators and PCOs is voluntary, and there is no penalty for non-compliance.

In 1999, SEET conducted a telephone survey of all registrants to evaluate their satisfaction with the registry. Of the 62 households on the registry, 37 (60%) participated in the survey. Results indicate that 62% of the surveyed registrants live in a rural area of which 49% live on a farm. Forty-one percent of the households were notified every time there was a pesticide application within 100 feet of their property, 32% were sometimes notified, and 27% were never notified.

Overall, 62% of the surveyed registrants were satisfied with the registry, although 76% of the registrants believed that 100 feet was not a protective enough distance. All surveyed registrants

stated that they would be willing to pay a small fee in exchange for mandatory notification by applicators.

Disease Cluster Response

SEET investigates citizens' reports of environmentally related disease clusters (such as cancer, and reproductive, neurological, and respiratory diseases) that may require regulatory or health interventions.

Coteau Childhood Leukemia

Public concern about childhood leukemia in the community of Coteau (Iberia Parish) was brought to the attention of SEET in May 1996. SEET has assessed the occurrence of childhood leukemia in the area of Coteau with the assistance of the LOUISIANA TUMOR REGISTRY. It has been determined that the incidence of childhood leukemia in Coteau is unusual, both spatially and temporally.

SEET began a population-based case-control study of childhood leukemia in a four-parish area consisting of Iberia, Lafayette, St. Martin, and Vermilion parishes. These four parishes were selected as the study area to provide a larger number of cases and to increase the probability of including children from neighboring areas who may have spent time in Coteau even though they did not live there.

A case in the OPH study is defined as a child who was diagnosed with leukemia between January 1, 1983 and December 31, 1997 while living in Lafayette, Iberia, St. Martin, or Vermilion Parish. The child must have been born in one of the four parishes and must have been less than 15 years old at the time the leukemia was diagnosed. Information on children with leukemia has been obtained from the LOUISIANA TUMOR REGISTRY and the ACADIANA TUMOR REGISTRY. A total of 31 known cases is being investigated by SEET in the four-parish area. The parents of all 31 cases and respective controls have been interviewed. SEET is in the process of evaluating interview responses in order to prepare a final report.

A detailed survey instrument (questionnaire) was developed by SEET to identify risk factors associated with childhood leukemia. A qualified interviewer was hired from the Lafayette area to conduct all interviews with the parents of cases and controls.

Cancer Mortality Trend Analysis

There has been concern for some time about whether industries along the Mississippi River between Baton Rouge and the Gulf of Mexico contribute to elevated lung cancer rates in the area. The LOUISIANA OFFICE OF PUBLIC HEALTH'S SECTION OF ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY (SEET) is completing a trend analysis of the Lower Mississippi River corridor to provide more accurate information to address this concern. Cancer rates, demographic factors, and industrial development have been tracked over 30 years, from the 1960s to the 1990s.

Cancer Mortality

Preliminary analysis of the data reveals that most of the average annual age-adjusted mortality rates (1960-1993) are nearly equal for the urban portion of the study area and the study area as a whole (the Lower Mississippi River corridor). This is expected since the urban area had most of the population base (80%) of the entire eleven-parish region. There were no statistically significant excesses or deficits of cancer deaths in the urban area as compared with the entire study area. However, lung cancer death rates for African-American males and Caucasian females in the urban area were higher than, but not significantly different from, the entire region. Most of the average annual age-adjusted mortality rates were nearly equal for the rural region when compared to the entire study area (1960-1993). Also in the rural region, stomach cancer

was significantly elevated in African-American males and lung cancer death rates for Caucasian males were higher than, but not significantly different from, the entire region.

Demographics

According to information obtained for the census years 1960, 1970, 1980, and 1990, more than 80% of the population in the study area has lived in the area since the 1960s, and more than 60% of that population is Caucasian. The African-American population in the study area has declined in rural areas and grown in urban areas. Median family income in the study area increased from $4,720 in 1960 to $29,512 in 1990. Since 1970, median family income increased by more than $10,000.

Industrial Mapping

The industries in the Lower Mississippi River corridor are distributed into twelve clusters (three or more industries in each cluster) spread among seven of the eleven parishes. In the early 1950s there were 15 industries in the corridor; by 1994, there were 92. Manufacturing industries in the area with over ten employees were categorized according to the potential cancer risk they posed. Between 1988 and 1994, the number of industries emitting known human carcinogens dropped from 42 to 36.

Mercury Blood Screening

In 1998, 313 individuals from selected parishes in Louisiana participated in a blood mercury screening. Ninety-eight percent of the study participants were within an expected range of mercury blood levels. The remaining two percent of participants exhibited slightly elevated mercury levels and was advised to decrease fish consumption.

The outcome of this investigation is a health risk assessment being presently conducted in partnership with the Tulane University School of Public Health and Tropical Medicine. This study will assess the exposure status of subsistence fishermen and their families as it relates to blood mercury levels.

N. VITAL STATISTICS

Vital statistics data provide a body of information that serves as the foundation for monitoring the health of Louisiana's residents. These data are collected via birth, death, fetal death, abortion, marriage, and divorce certificates. Collection and processing of vital statistics information is the responsibility of the VITAL RECORDS REGISTRY, OFFICE OF PUBLIC HEALTH.

A large number of health status indicators rely on vital statistics data. These indicators include infant death rates, numbers of low birthweight infants, percentage of mothers lacking adequate prenatal care, teen birth rates, homicide and suicide rates, rates of death from AIDS and motor vehicle injuries, and many others. Vital statistics data are used in both the public and the private sectors to identify health needs in the population and to target effective health interventions. Vital statistics health status indicators also are an important component in measuring achievement of CENTERS FOR DISEASE CONTROL Healthy People 2000 and 2010 objectives.

The role of the STATE CENTER FOR HEALTH STATISTICS is to analyze vital statistics data and distribute findings to government programs, community organizations, universities, and interested members of the general public. The Center accomplishes this through publication of

the annual *Louisiana Vital Statistics Report* , and through response to ad hoc requests for data and information. The Center also is responsible for compilation of information from DEPARTMENT OF HEALTH AND HOSPITALS programs to create the legislatively mandated annual *Louisiana Health Report Card* .

1999 Statistics
Please refer to "Chapter I: Population and Vital Statistics".

Reports
Reports and data tables published by the STATE CENTER FOR HEALTH STATISTICS, including the annual *Louisiana Health Report Card, Louisiana Vital Statistics Report,* and the *Louisiana Vital Statistics Overview*, can be viewed and downloaded by the public at our Internet web site (please refer to "Contact Information" at the end of this publication). The STATE CENTER FOR HEALTH STATISTICS also maintains databases of births, deaths, fetal deaths, abortions, marriages, and divorces, which it uses to respond to data requests from communities, agencies, and the general public through generation of ad hoc reports and analyses.

O. STATE HEALTH CARE DATA CLEARINGHOUSE

Act 622 the 1997 Regular Legislative Session defined the STATE HEALTH CARE DATA CLEARINGHOUSE as the agency responsible for the collection of health care and health industry-related data. Act 622 charges the STATE HEALTH CARE DATA CLEARINGHOUSE with responsibility for creating population-based health care data registries that will offer Louisiana and its health care providers their first opportunity to plan and operate systematic intervention strategies that address the antecedents of death.

In prioritizing the mandates of the HEALTH CARE DATA CLEARINGHOUSE, the OFFICE OF PUBLIC HEALTH considered the various health information data streams already in existence and the data collection experiences of some 36 other states, and determined that Louisiana would benefit most by focusing initial data collection efforts on hospital inpatient discharge data. In addition to the inpatient discharge database, the STATE HEALTH CARE DATA CLEARINGHOUSE is also planning to work with hospitals and other facilities across the state to develop a statewide hospital emergency room data system and other data sets to provide an even more complete picture of Louisiana health, and to address the urgent concerns of the increasing threat of bioterrorism.

Louisiana Hospital Inpatient Discharge Database (LAHIDD)

Many areas in Louisiana are experiencing rising health care costs and shortages of health professionals, making it essential that patients, health care professionals, hospitals, and third party payers have information needed to determine appropriate and efficient use of health services, and accurate evaluation of needs and usage. This requires an understanding of patterns and trends in the availability, utilization, and costs of health care services, and the underlying patterns of disease that necessitate these services. The Louisiana Hospital Inpatient Discharge Database (LAHIDD) holds the information base needed to make these determinations.

The LAHIDD is a data registry containing inpatient discharge data submitted to the OFFICE OF PUBLIC HEALTH by hospitals in Louisiana. The registry contains discharge data dating back to January 1, 1998. As the state's only comprehensive, population-based repository of hospital inpatient data, LAHIDD contains information needed to measure and evaluate illness and cost

trends in the state, i.e., information on diagnoses, procedures performed, and the costs of those procedures. Until the creation of this database, this information could be estimated only for selected illnesses through surveys that included only subsets of the state's population.

For the most part, the data sent by hospitals to the registry are a natural by-product of hospital billing activity and are already widely available in a reasonably standard electronic format. The collection of these data place the smallest additional burden on the state's medical care providers, while speaking directly to the legislatively recognized need to understand "patterns and trends in the availability, use, and charges for medical services."

Receipt of the tenth series of data submissions from hospitals (discharges occurring from July to September 2000) currently is in progress. One hundred seventy-nine licensed hospitals housing 25,706 beds participate in submission of data to the STATE HEALTH CARE DATA CLEARINGHOUSE. In the most recently concluded submission, which contained discharges occurring from April through June 2000, data submissions were received for 73% of the state's hospital beds, while 26% of the beds requested extensions and 1% of the beds invoked general waivers that exclude them from submitting data.

Activities to date

Prior to fall 2000, LAHIDD activities focused on creating the organizational infrastructure needed to assure two-way communication and an easy flow of data from hospitals to the STATE HEALTH CARE DATA CLEARINGHOUSE. These activities include:

- providing information to hospitals regarding regulations and submittal procedures
- receiving scheduled data submissions.
- performing preliminary data error checks
- notifying hospitals when excessive numbers of data errors were found in these preliminary checks

In the past six months much progress has been made in the development of the technologic infrastructure needed to house the database and facilitate access to the data. This progress includes:

- collaborating with the OFFICE OF PUBLIC HEALTH MANAGEMENT INFORMATION SYSTEMS SECTION to
  - complete the software structure needed to construct the LAHIDD database
  - load the data into the database structure. The database currently contains over 1,500,000 discharge records dating from January 1998 through June 2000
  - Identify software tools needed to (1) improve the speed and accuracy of data loading and (2) enable de-duplication and logical error checking - both of which are required before data are available for analysis
- collaborating with the OFFICE OF PUBLIC HEALTH MANAGEMENT INFORMATION SYSTEMS SECTION (for technical expertise) and CARDIOVASCULAR HEALTH CORE CAPACITY PROGRAM (for financing) to purchase
  - a hardware platform with the capacity to hold and backup the LAHIDD database
  - a software tool that will enable Internet-based data reporting

- developing the following software tools, which will be distributed to hospitals in Spring 2001:
  - a data entry tool to be used by hospitals that currently lack the capability to submit data electronically
  - a data quality assurance tool that will enable hospitals to perform preliminary data error checks before submitting data to LAHIDD
- determining the content and format of hard copy and Internet-based reports to be distributed to submitting hospitals
- establishing data access procedures that will assure maintenance of legislatively-mandated confidentiality restrictions.

IV. PREVENTIVE HEALTH OUTREACH, SERVICE, AND EDUCATION PROGRAMS

The Department of Health and Hospitals provides Louisianans with a variety of Preventive Health Outreach Programs targeted to assure the health of its most vulnerable citizens: infants and children, adolescents, women, families, and persons suffering from infectious and chronic diseases, violence and injury, substance addictions, and mental impairment. The following programs provide needed health care to thousands of individual Louisiana residents. In doing so they are essential to the health of the state as a whole.

Programs Targeting Infants, Children, Adolescents, and Women

A. Childhood Immunization Initiative—Shots for Tots

The Shots for Tots Program, through the Immunization Program of the Office of Public Health, was developed to improve immunization levels among infants and toddlers. The program has four major methods to improve immunization levels: (1) service delivery, (2) information and education, (3) assessment, and (4) coordination and oversight.

- Service delivery is increased by increasing the number of towns and cities where immunizations can be received, by reducing the barriers for families, by providing evening and weekend immunization clinics, and by improving communication among providers.
- Information and education is provided to health care providers and to parents. Health care providers are informed about the correct use of vaccines, and parents are educated about the importance of having their children immunized on time.
- Assessment is used to provide feedback to providers about their immunization practices and about the concerns of families using their services.
- Coordination and oversight establish a central point of responsibility to help improve all of the methods listed above.

Shots for Tots has improved access to immunizations, decreased cost to families, improved public awareness of the need for immunizations, and educated health care providers about proper immunization practices. The following chart illustrates the effectiveness of the Shots for Tots Program. Since its inception in 1992, immunization levels among two-year-old children receiving care at public health units have increased by 25%.

Immunization Levels Among Two-Year-Old Children Receiving Care at Public Health Units Louisiana, 1992-2000

1992	55%
1993	59%
1994	64%
1995	75%
1996	79%
1997	81%
1998	82%
1999	80%
2000	83%

Source: Louisiana Office of Public Health, Immunization Program

B. SUDDEN INFANT DEATH SYNDROME (SIDS)

The DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH, SUDDEN INFANT DEATH SYNDROME (SIDS) COUNSELING AND RISK REDUCTION PROGRAM is designed to increase public awareness on the topic of SIDS and to provide education to reduce the risk of SIDS deaths. Educational materials on SIDS risk-reduction have been developed for distribution to populations at risk. These materials include two fact sheets, one providing basic SIDS information and the other describing state specific statistics on SIDS risk factors and practices in Louisiana. SIDS risk reduction educational training materials for child care providers and outreach workers also have been revised. Grief counseling is made available to all families who have experienced the death of an infant due to SIDS. A SIDS risk reduction community education initiative has begun in Orleans Parish. SIDS risk reduction activities in Orleans Parish have included:

- Conducting media and community outreach events for SIDS Awareness Month
- Conducting education awareness sessions to community groups and organizations and professional educational in-service training to childcare providers, nurses, and other health professionals
- Forming an Orleans Parish SIDS Steering Committee to identify appropriate channels for reaching at risk populations and developing outreach strategies targeted to the at risk population. The committee is composed of a diverse group of public health professionals, medical professionals, community organizations, faith-community leaders and consumers (i.e. parents and grandparents).

In addition to public and professional education and grief counseling, standard data are collected on each case with the hope of identifying preventable circumstances that are associated with unexpected deaths in infancy. Cases are assessed for SIDS epidemiology, statistics, risk factors, ethnic-racial trends and geographic specific trends. A program to improve the investigation of unexpected infant deaths through the training and certification of death scene investigators was begun in 1996. Over 275 investigators from coroner offices and law enforcement have been trained in death scene investigation in cases of unexpected deaths in infants.

C. HEARING, SPEECH, AND VISION PROGRAM: SOUND START PROGRAM FOR THE EARLY IDENTIFICATION OF HEARING IMPAIRMENTS IN INFANTS

More than one in twenty-five preschoolers suffer from some type of communication disorder, i.e., speech, language, and/or hearing impairment. Four out of every 1,000 babies born have a significant hearing loss. Vision problems affect one in twenty preschoolers and one in four school age children.

The goal of the HEARING, SPEECH AND VISION PROGRAM is to identify these problems in children as early as possible. A child's vision, hearing, and language development are the most important skills they will need to be able to learn and develop. Research shows that children who have hearing loss identified at birth and who are successfully enrolled in early intervention programs can reach appropriate developmental levels by the time they begin school. Early intervention has profound lifelong benefits for infants and toddlers with hearing impairment and for their families, while containing costs of special education and other services provided by the state.

The year 2000 was an important turning point for the HEARING, SPEECH AND VISION PROGRAM. The current state budget crisis, as well as a mandate from the legislature, the citizens of the state and Governor Foster, has made it imperative that the department work diligently to consolidate services and collaborate with other public agencies as well as the private sector to avoid needless duplication of effort and services. In the future, the DEPARTMENT OF EDUCATION as well as providers in the private sector will provide vision screening services. The HEARING, SPEECH AND VISION PROGRAM is planning to make available training and equipment for loan to schools to continue vision screening.

The audiologists under the HEARING, SPEECH AND VISION PROGRAM will work to assure audiological services are available in all areas of the state through the private sector and other public agencies. The department has worked closely with Medicaid and successfully raised the reimbursement rates for hearing aids. This is expected to positively influence and increase the provision of hearing aid services to children in the private sector by increasing the number of private providers who will accept Medicaid coverage for hearing aids, as well as for the required hearing testing. This will enable children to more easily receive services from local providers closer to the community in which they live. No child will go without essential services.

The Sound Start Program under the Hearing, Speech and Vision Program also made great strides during 2000. The program works through each community to assure that every birthing hospital performs hearing screening tests for newborns. In July of 1999 the legislature mandated UNIVERSAL NEWBORN HEARING SCREENING, or the hearing screening of all infants prior to discharge from the hospital or birthing center. Since that time, the Sound Start Program has been working diligently to insure that hospitals are ready, able and willing to comply with the mandate for universal newborn hearing screening.

The success of the program is easily shown by the fact that with the average age of identification of hearing loss across the United States at 30-36 months, since the beginning of the Sound Start Program in 1994, the average age for children identified through the Louisiana program has remained below 3 months of age.

In early 2000, the HEARING, SPEECH AND VISION PROGRAM was awarded a Maternal and Child Health federal grant to expand universal newborn hearing screening and intervention in Louisiana. The funds are earmarked to coordinate and strengthen the program. A Program Coordinator will oversee implementation of the program statewide and a Systems Development Coordinator will evaluate and enhance follow-up and early intervention issues. Community and private sector involvement through physicians, education personnel, civic and charity organizations, parents, hospital staffs, the deaf community and other professionals will be increased with this project. This will ensure that the program is community based and utilizes the strengths and assets of individual regions while maintaining statewide coordination.

D. CHILDREN'S SPECIAL HEALTH SERVICES

CHILDREN'S SPECIAL HEALTH SERVICES (CSHS) is a program that provides services for eligible children and families with serious disabilities that significantly limit major life activities. These children have complex medical conditions that may be rare, severe, or disabling and require pediatric subspecialty services on an on-going basis.

Some of the products and services provided by the CHILDREN'S SPECIAL HEALTH SERVICES program are medications, durable medical equipment, home health care, physical therapy, hospital care, parent training, and case management to coordinate primary and specialty services. There are nine regional CSHS clinics throughout the State of Louisiana, which together served 7,148 children in the FY 99-00 and handled a volume of 18,368 clinic visits.

CSHS provides services to children with special health care needs, many with complex, severe medically disabling conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, cerebral palsy, neurological disorders and others. These conditions often require complex medical care including numerous surgeries, hospitalization, costly drug therapy, etc., but because of the cost-efficient manner in which CSHS provides these services, the cost of treating these children and providing support to their families is very low. The average cost per patient from CSHS is $994.16 in FY '99 based on annual expenditures.

In the year 2000, CSHS developed a Medical Home Project in association with the Louisiana Chapter of the American Academy of Pediatrics, LSU Health Sciences Center, Tulane Medical School, Children's Hospital and other community agencies and groups concerned with children with special needs. This project has gained tremendous support for training primary care physicians to provide a "medical home" for children with special health care needs. Two training sessions are planned for 2001 in New Orleans and Shreveport.

CSHS has also supported a Governor's Task Force to develop a Birth Defects Registry. Louisiana is one of only 8 states without a system for surveillance of birth defects. Birth defects are one of the top 5 leading causes of infant mortality in the state. The prevention of these disabling conditions are only possible after more information is known about how many occur and what the causes may be. Legislation will be introduced in 2001 to implement Louisiana's Birth Defects Registry.

E. SAFE KIDS COALITION

The DHH, OFFICE OF PUBLIC HEALTH, INJURY RESEARCH AND PREVENTION SECTION includes the Louisiana SAFE KIDS Coalition,. This coalition is dedicated to the reductions of unintentional injuries in children.

At the state level, the Louisiana SAFE KIDS Coalition promotes media coverage of preventable childhood injuries, injury prevention events, and provides ongoing messages that unintentional injuries are the leading cause of death for children under age fourteen. The Coalition also works energetically to promote policies and programs to prevent childhood injury. Several (8) community chapters and 3 community coalitions sponsor injury prevention education activities in their areas.

Examples of these injury prevention education activities include: hands-on car seat safety clinics, where trained specialists check for proper car seat installation and educate parents how to use car seats correctly; promotion of the use of bike helmets through reminder tags that are hung on bicycle handlebars; and bicycle rodeos measured by appropriate use of traffic signs. For information on the broad list of prevention materials available or information on how to start a chapter, you may contact the Safe Kids Coalition at 504 568 2508.

F. Child Care Health Consultant Program

The American Academy of Pediatrics/American Public Health Association recommends that each child care facility should utilize the services of a health consultant to provide ongoing assistance in the area of health. Louisiana was one of the first states to institute such a program.

The Maternal and Child Health Program of the Office of Public Health coordinates the activities of the Child Care Health Consultant Program. By combining professional health experience with knowledge and training in child care, consultants work to support, assist, and problem solve with child care providers in order to improve the safety and quality of child care. Consultants serve as a source of education, guidance, and support to child care facilities; provide technical assistance; act as health resource and referral persons; and provide access to health care information. This program also has the advantage of bringing together a multi-disciplinary network of both public and private health professionals from a variety of settings to address local community needs.

To date, there are 150 health professionals who have been trained and are certified by the DHH, Office of Public Health and the Department of Social Services, Bureau of Licensing. In 1998, 107,620 infants, children, and adolescents were seen in a total of 228,366 visits. More than 17,000 child care providers have received some health and/or safety training.

G. Prevent Abuse and Neglect through Dental Awareness (P.A.N.D.A.)

The P.A.N.D.A. (Prevent Abuse and Neglect through Dental Awareness) program was formed through the efforts of the Oral Health Program in the Office of Public Health. The P.A.N.D.A. coalition is maintained by community members and is chaired by the president of the Louisiana Chapter of the Academy of Pediatric Dentistry. This program aims to provide training and education of dental care professionals on detecting and reporting suspected child abuse and neglect.

H. Maternal and Child Health Program

The Child Health Program, of the Maternal and Child Health Program, Office of Public Health, is a program that offers preventive health services to infants and children who are unable to access such services because of geographic or financial barriers or lack of providers.

This program provides periodic health appointments through parish health units statewide, which can involve a history and physical examination; immunizations; assessment of growth; assessment of developmental status; laboratory screening for PKU, congenital hypothyroidism, sickle cell disease, anemia, urinary tract problems, and lead poisoning; screening for vision, hearing or speech problems; and parental counseling and education. Nutritionist and social services are available in addition to medical and nursing services.

In State Fiscal Year 2000, 114,524 infants, children, and adolescents were seen in a total of 231,900 visits.

Through parish health units statewide, the Maternity Program offers pregnancy testing, prenatal care, prenatal and nutrition education and counseling to women who are unable to access such services because of geographic or financial barriers or lack of providers.

The prenatal care is comprehensive including regular physical assessments, laboratory tests, counseling and education on physical and behavioral issues, and home visiting when indicated. HIV education for all patients and HIV screening and counseling is for those who choose are provided.

In State Fiscal Year 2000, 8454 pregnant women received comprehensive prenatal care and 30,156 pregnant women received prenatal and nutrition counseling and education in conjunction with WIC services. Over 11,000 women came to the health units for pregnancy tests only. The total number of maternity related visits was 126,385

In addition to these direct services, the Maternal and Child Health Program works with the Medicaid and LaCHIP Programs to improve access to health care services for pregnant women, infants, children, and adolescents by supplementing their out reach through a Robert Wood Johnson Covering Kids grant.

I. ADOLESCENT SCHOOL HEALTH INITIATIVE

Pursuant to a legislative request, the DHH OFFICE OF PUBLIC HEALTH (OPH) conducted a study in 1990 that concluded that the causes of adolescent deaths and illnesses could be reduced or prevented through greater adolescent health education and improved teen access to primary/preventive health care and professional counseling. Therefore, in 1991 the Louisiana State Legislature created the Adolescent School Health Initiative to facilitate the development of comprehensive health centers in public middle and senior high schools.

The School-Based Health Care Program, officially known as the Adolescent School Health Initiative, is directed by the DHH OFFICE OF PUBLIC HEALTH, MATERNAL AND CHILD HEALTH PROGRAM. School Based Health Centers (SBHCs) are an integral part of the State's Comprehensive School Health Program, which also encompasses education, school environment, nutrition, physical fitness, and parent and community involvement.

Sources of funding for the School-Based Health Centers (SBHCs) include OPH State General Fund (Tobacco Settlement monies), Maternal and Child Health Block Grant, local in-kind contributions, and Medicaid reimbursement.

School-Based Health Centers are established by a sponsoring agency (the grantee), which is responsible for management of the health center. Hospitals, medical schools, health departments, youth-serving agencies, community organizations, or school systems may be sponsoring agencies. Each SBHC's staff includes a licensed physician, a nurse or nurse practitioner, a mental health counselor, a clinic administrator, and support staff, who work in collaboration with the counselors, social workers, psychologists, and speech, physical, and occupational therapists on school campuses. Services provided include preventive health care, medical screenings, sports and employment physicals, treatment for common simple illnesses, referral and follow-up for serious illnesses and emergencies, mental health counseling, immunizations, and preventive services for high-risk conditions, such as pregnancy, sexually transmitted disease, drug and alcohol abuse, violence, and injuries.

In the 1999-2000 academic year, 40 School-Based Health Centers were operational in 17 parishes, serving 64 public schools and providing access to care to nearly 39,000 students. By

the end of the 2000-01 there will be 47 School-Based Health Centers in 20 parishes. Many sites have expanded services to primary and elementary feeder schools.

In the 1999-2000 school year, 22,625 students received services, and there were 96,734 individual visits to the centers. This number does not include students who participated in group counseling sessions with licensed social workers.

J. WOMEN'S PREVENTIVE HEALTH PROGRAM

The WOMEN'S PREVENTIVE HEALTH PROGRAM (WPHP) exists to improve longevity and quality of life for women in Louisiana by reducing morbidity and mortality due to preventable causes. The mission of the program accomplishes the following activities:

- Screening for breast and cervical cancer as an early detection strategy.
- Health guidance and counseling to influence positively those health behaviors known to be associated with poor health outcomes particularly hypertension, diabetes, and obesity.
- Empowerment of community-based organizations to deliver the message of preventive health to female peers and thus to expand the program throughout the state.

The last year has been very effective in the communities throughout many regions of the state. More than 6,000 women were involved in outreach and screening activities with public and private partners in health. Since the program's inception, dozens of abnormalities have been found and successful treatment strategies pursued.

Though the WPHP provides screening and diagnostic services only, case management is an important component of the program. Women who have an established disease requiring treatment are referred to other health care providers. Eligibility for specific screening services is based on age, income and insurance status. An integral component of the program is the collection of data regarding risk factors, screening, and screening results to assure that women who need treatment reach a treatment provider.

Programs Targeting Families

K. HOME VISITATION PROGRAMS

Paraprofessional Home Visitation Programs

The MATERNAL AND CHILD HEALTH PROGRAM (MCH) of the OFFICE OF PUBLIC HEALTH has undertaken home visitation programs to impact Louisiana's high rates of infant mortality, low birth weight, and child maltreatment. Currently there are four Paraprofessional Home Visitation Programs: Project Hope (serving first-time mothers and their babies in Ouachita Parish), ETC ALPHA (serving high-risk pregnant and parenting teens and their babies in Calcasieu Parish), Healthy Kids (serving first time and teen parents and their babies in Iberia Parish), and First Time Parents (serving high risk, low income parents and their babies in East Baton Rouge Parish). The programs are based on the Hawaii Healthy Start and Healthy Families America program models. These programs have been successful in securing community support. This model seeks to prevent child abuse and neglect by focusing interventions on promoting child

growth and development, modeling and fostering positive parenting skills and parent-child interactions, assuring provision of needed health care, and developing support systems for families.

By the end of fiscal year 99-00, Louisiana's Paraprofessional Home Visitation Programs had a total of 300 active families and had completed 4,278 home visits.

Nurse Home Visitation Program

During fiscal year 99-00, the MATERNAL AND CHILD HEALTH (MCH) PROGRAM implemented the Nurse Home Visitation Model in 4 sites in Louisiana. Known as the BEST (Building Early Strengths Together) Program, services had already been initiated in Region IV (Iberia, St. Martin and Vermilion parishes) and Region VIII (Franklin, Madison, Morehouse and Richland parishes) in 1999. Services were expanded to Region III (Terrebone and Lafourche parishes) and Region V (Calcasieu, Beauregard and Allen parishes) in the spring of 2000. A collaboration between the OFFICE OF PUBLIC HEALTH and the OFFICE OF MENTAL HEALTH was successfully established to fund the mental health component of the program.

The BEST Program is for first time mothers of low socio-economic status. Home Visiting Nurses follow a very strict program protocol that calls for regular visits to the family from twenty-eight weeks of pregnancy until the infant is two years of age. This model was chosen by MCH because of its proven effectiveness as a preventive intervention. Clinical trials and longitudinal studies have shown that this model of prevention significantly reduced by 79% the verified reports of child abuse and neglect, reduced by 31% the number of subsequent births, and increased by 83% the rates of labor force participation. By the end of December 2000, the BEST Program had 358 active families, with 269 babies already delivered. The nurses have completed 9,101 home visits since the inception of the program.

L. PUBLIC INFORMATION CAMPAIGN AND PROVIDER TRANING FOR PARENTING EDUCATION & CHILD ABUSE PREVENTION

PREVENT CHILD ABUSE LOUISIANA (PCAL), in conjunction with the DHH, OFFICE OF PUBLIC HEALTH, is in the fourth year of a statewide social marketing campaign designed to reach parents with educational messages about parenting and to encourage the use of a toll-fee information, support, and referral services for families: PCAL's HELPLINE (800-348-KIDS). Campaign themes have addressed positive communication, positive discipline, and stress prevention for parents.

To emphasize these educational topics and to conduct training sessions in their communities, a volunteer speakers bureau has been established in major cities throughout the state. The trained volunteers include representatives from the OFFICE OF COMMUNITY SERVICES, law enforcement, the media, and health care. Speakers address parent groups, children, community organizations, and "other caregivers" (teachers, day care staff, etc.) in various settings.

In addition, the MATERNAL AND CHILD HEALTH PROGRAM (MCH) of the OFFICE OF PUBLIC HEALTH has trained all public health nurses and public health social workers in Bright Futures. The curriculum of Bright Futures is designed to promote and improve the health, education, and well-being of children, adolescents, families, and communities. Furthermore, MCH has trained all nursing and social work staff in Infant Mental Health in four regions of the state. This 25-hour training, completed in five separate five-hour sessions, is designed to improve staffs' knowledge

and skills in the early recognition of factors and conditions that place the infant and caregiver at risk for immediate, as well as long-term, problems in social, emotional, and cognitive growth and development. The Infant Mental Health training has been completed in Regions III, IV, V, and VIII, with Regions VI and VII set for training in fiscal year 00-01.

M. LOUISIANA'S SERVICE SYSTEM FOR PERSONS WITH DEVELOPMENTAL DISABILITIES

The LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS' (DHH) OFFICE FOR CITIZENS WITH DEVELOPMENTAL DISABILITIES (OCDD) was established under Act 659 of the 1983 Regular Session. OCDD provides an evaluation of developmental disabilities to persons and/or their families who request such an evaluation. This evaluation of developmental disabilities determines the individual's eligibility for services through Louisiana's MR/DD Services System. The LA R.S. 28:380 et seq. defines a developmental disability as a severe, chronic disability that is attributable to mental retardation, cerebral palsy, epilepsy, or autism or to any other condition (except mental illness) found to be closely related to mental retardation. Related conditions are included because these conditions result in impairment of general intellectual functioning or adaptive behavior similar to that of persons with mental retardation or require similar treatment and services. The disability must have occurred prior to age 22, be likely to continue indefinitely, and result in substantial limitations in three or more areas of major life activity, such as self-care, language, learning, mobility, self-direction, and capacity for independent living.

The MR/DD Services System includes public and private residential services and other mental retardation and developmental disabilities services. OCDD's administers the MR/DD Services System through its eight Community Services Regional Offices and nine Developmental Centers, which are located across the state in or near major cities. The Community Services Regional Offices serve as the point of entry for OCDD services. The Developmental Centers provide a variety of residential services including 24-hour care and active treatment services. Other services provided by some of these Centers include community homes, extended family living services, formerly know as substitute family care, and day programs with vocational or habilitation services for the non-residents in their localities. As a part of this Services System the OCDD Regional Offices secure a broad range of services including case management, early intervention services to infants and toddlers, individual and family support services, including personal care assistance, respite, crisis intervention and supported living services as well as vocational and habilitative services. These services are provided by private provider agencies through contractual agreements or through individualized agreements with individuals and families who obtain their own service providers.

OCDD serves eligible individuals through a range of services and supports that help the individual or family plan for, prevent, or lessen the impact of adverse outcomes from their disability. Early intervention services, designed for infants and toddlers from birth to 36 months of age, strive to prevent additional developmental delays through a range of therapeutic, instructional, behavioral and social services. Through the Family Support Program, crisis intervention services are provided to stabilize life-threatening situations or to plan for behavioral contingencies, and supported living services are provided to assist people to live independently in the community. The Cash Subsidy Program provides financial assistance to allow families of children with severe disabilities to care for their children at home. OCDD also works with individuals and/or families in the development of the Plan of Support, which allows the individual, and/or the families to be involved in planning for the future. This process, which is

based on informed choice, also empowers persons with developmental disabilities to choose the services and supports they need in order to improve their quality of life and achieve the greatest degree of independence in all life areas.

Programs Targeting Infectious Diseases

N. Tuberculosis (TB) Prevention and Outreach

The Department of Health and Hospitals, through the Office of Public Health's TB Control Section, monitors the treatment of reported cases of TB through the work of Disease Intervention Specialists (DIS). DIS staff accomplish this monitoring by Directly Observed Therapy (DOT)—a service provided to ensure compliance with and completion of treatment for all patients, public or private. DIS staff also investigate each case of TB to assure timely identification and evaluation of contacts to TB.

Of those patients who have been designated "closed," 96% completed therapy in 1998 as compared with the 97% completing therapy among the "closed" cases in 1997. The high therapy completion was due, in part, to both the intense DOT efforts of DIS staff and to the utilization of incentives and enablers.

O. Sexually Transmitted Disease (STD) and HIV/AIDS Prevention Programs

The Department of Health & Hospitals, Office of Public Health, aims to prevent the spread of STDs and HIV/AIDS through a variety of methods, including prevention education; HIV counseling, testing, referral, and partner notification; STD treatment and control, including syphilis partner notification; peer programs; street and community outreach in selected zip code areas; and statewide condom distribution via businesses in communities with high rates of sexually transmitted diseases and HIV/AIDS.

Sexually Transmitted Diseases (STDs)
STD control is a labor-intensive task, relying on the rapid location of a person's sexual partners in the community to halt further spread of the disease. To prevent the spread of disease, the STD Control Program conducts four basic activities:

- Prevention activities - education and provision of information to patients and the general public about STDs and the use of condoms
- Clinical services - testing, diagnosis, and treatment of patients seen in the clinics
- Epidemiology - surveillance, location, and referral of persons suspected of having an STD, for examination and early treatment,
- Targeted screening - as a mechanism to discover infections in certain populations and determine disease prevalence.

In order to reach people who have the highest risk of infection, the STD Control Program works with a number of other health-related programs, including Maternal and Child Health,

FAMILY PLANNING, correctional institutions, substance abuse centers, and other facilities where STDs may be prevalent. Collaboration with these programs and efforts of STD field personnel resulted in the administering of over 240,000 STD screening tests in 1999.

HIV/AIDS

The HIV/AIDS Prevention component of the program was driven by a CDC required process called community planning. This process operated under the structure of 9 regional, 1 local and 1 statewide planning bodies. The Health Department Co-Chaired all of these bodies and supported, facilitated and coordinated this statewide activity. These regional and local groups met monthly and the statewide group met three times. A three-year HIV/STD Prevention Comprehensive Statewide Plan was developed and submitted with the OPH HIV/AIDS PROGRAM (HAP) Cooperative Agreement to the CENTERS FOR DISEASE CONTROL AND PREVENTION. This plan identified intervention strategies, target populations and geographic locations that are to be conducted throughout the state.

During 2000, a Solicitation of Proposals process was conducted and 21 community based organizations were funded to provide prevention interventions. These activities included condom availability, street and community outreach, changing drug environments, needle availability, peer programs and counseling, testing and referrals. OPH HAP provided support, contract monitoring, technical assistance, capacity building and training. Approximately 9 million condoms have been distributed through public health, substance abuse, mental health clinics and through street and community outreach which is conducted through community based organizations. 60,000 HIV prevention counseling and testing sessions were conducted, 213 public health staff and community based organization staff were trained in prevention counseling and 18 professionals were trained in a training of trainers curriculum for prevention counseling. 59 professionals were trained in delivering outreach activities, 60 community based organization staff were involved in a two day orientation and 375 public health and community based organization staff were trained at an 2-day workshop, which included a half day institute focusing on working with youth. Over 325,000 high risk individuals received a risk reduction message in their communities and 84 peer sessions were conducted reaching over 812 high risk individuals throughout the state. Twenty high risk females in the New Orleans area participated in a pilot project for prevention case management. Contact and partner notification were attempted for 1,200 HIV positive individuals and their partners, and prevention counseling was provided, when appropriate.

The program received and responded to over 4,000 hotline calls and distributed 275,000 pieces of risk reduction literature. The Louisiana HIV/AIDS Line was published bi-monthly and distributed to public health, substance abuse, mental health and community based organization staff.

The HIV/AIDS Services Component of the program has provided 3,000 HIV infected individuals with combination antiretroviral therapy medications through the Louisiana AIDS Drug Assistance Program (ADAP). This program is funded through the Ryan White CARE Act Title II of the HEALTH RESOURCES AND SERVICE ADMINISTRATION (HRSA). Additionally, nearly 2,800 HIV infected individuals received assistance in obtaining primary medical care and essential support services such as transportation, child care, respite care, case management, food baskets and home delivered meals, and substance abuse counseling. During this same time period, 218 HIV infected individuals also received home based care and hospice services. Although Louisiana has one of the lowest rates of insured adults and children in the nation, 157 HIV infected individuals were able to maintain their own private health insurance with support from the Health Insurance Continuation Program (HICP) and the Co-payment and Deductible Assistance Program (CDAP). The HIV/AIDS Program also supports legal advocacy services,

and 1,150 HIV infected individuals were able to receive legal assistance to address issues such as living wills, guardianships, custody, discrimination, breach of confidentiality, etc.

A new program implemented in 1999 is the Perinatal HIV Prevention Program funded by a three-year grant through the CENTERS FOR DISEASE CONTROL AND PREVENTION. The focus of this program is to prevent the transmission of HIV to newborns and implement rapid testing protocols in major delivery hospitals throughout Louisiana. The program has developed a health care provider education packet to inform medical providers of the latest Public Health Standards for the treatment of HIV infection in pregnant women.

To assess the current level of unmet need and assist in the allocation of service funding to the appropriate areas, two needs assessments were conducted. The first was an assessment done with the state prison system in Louisiana to determine what prevention and treatment activities were currently offered for the incarcerated population. The second was a Statewide Needs Assessment, which collected, analyzed and published the results of 1,422 responses from HIV infected Louisiana residents. A Regional Service Utilization Disparity Analysis was also conducted in order to compare the percentage of individuals in each region living with HIV/AIDS, by race and gender, with those receiving services, by race and gender, through any Ryan White Title II-funded program. This analysis was completed in order to assess whether or not there was greater than a 10% disparity in access for any of the various populations impacted by HIV/AIDS.

Programs Targeting Chronic Diseases

P. CARDIOVASCULAR HEALTH CORE CAPACITY PROGRAM

In the past year the CARDIOVASCULAR HEALTH SECTION OF THE CHRONIC DISEASES PROGRAM, OFFICE OF PUBLIC HEALTH, has developed the state's Cardiovascular Health Core Capacity Program. The purpose of this program is the development of a state plan for reduction of cardiovascular disease (CVD) by building upon core capacities that already exist in the state, and by filling gaps in capacity and leadership in the state health department in areas critical to the implementation and management of a successful statewide comprehensive CVD prevention program.

Recognizing the immense burden of cardiovascular diseases, the U.S. Congress made available funding of $8.1 million in fiscal year 1998 to initiate a national, state-based cardiovascular disease prevention program. Louisiana was one of 11 states awarded funding for establishment of a Cardiovascular Health Core Capacity Program. The focus of the Core Capacity Program is the development and promotion of **environmental and policy changes** that support good nutrition, enhance physical activity, and improve risk factors for cardiovascular disease. Program objectives include:

- Reduction of disparities in CVD risk factors, occurrence, and treatment
- Delay of the onset of CVD and postponement of death from CVD
- Reduction of disabling conditions stemming form CVD.

As the cause of almost 40 percent (38.5%) of deaths in Louisiana, cardiovascular disease (CVD) is the state's leading cause of death. Although age-adjusted death rates from CVD declined 19.1% between 1986 and 1996, a perceptible leveling off of these rates has occurred

in the last five years. The decline in CVD deaths presumably is due to improvements in medical care and to healthier lifestyles. However, according to the American Heart Association, Louisiana has the fourth highest cardiovascular age-adjusted death rate in the nation.

CVD is not just a disease of old age. Arteriosclerosis, the process of arterial narrowing that causes heart attacks and strokes, begins in the teenage years. The age at which blocked arteries actually kill varies greatly, and death often occurs before old age. One in five Louisianans who died of CVD in 1996 was younger than 65 years of age.

Most deaths due to CVD are preventable. Individuals who choose to control certain risk factors can slow (or even reverse) the process of arterial blockage and decrease their risk of having a heart attack or stroke. Risk factors that can be changed include smoking, overweight, sedentary lifestyle, high blood pressure and high blood cholesterol. Diabetes is a strong risk factor for CVD and is itself often preventable by through adequate physical activity, healthy diet, and maintenance of optimal weight.

Some CVD risk factors that cannot be changed are old age, a family history of heart attack at a young age, and most importantly, a history of previous heart attack or stroke. Individuals with these risk factors should be particularly diligent in addressing the changeable risk factors.

Cardiovascular Health Core Capacity Program accomplishments to date include definition of basic programmatic functions and implementation of activities at the state level; inventorying of policy and environmental strategies; identification of potential non-governmental partners; and provision of infrastructure support for the Louisiana Inpatient Hospital Discharge Database, which will be a prime source of data for evaluation of program effectiveness. During the upcoming year the program's agenda will add development of training and technical assistance, strategies for addressing priority populations, and intervention strategies for reducing risk behaviors.

Q. DIABETES CONTROL PROGRAM

The overall goal of the Louisiana DIABETES CONTROL PROGRAM is to reduce the burden of diabetes in Louisiana using the following methods: *Monitoring* the prevalence and incidence of diabetes, and available care and education opportunities; *Informing* the population on how to use existing resources as efficiently and effectively as possible; *Strengthening* weak points in the diabetes care system. Through these methods, the DIABETES CONTROL PROGRAM hopes to reduce morbidity and mortality related to diabetes in the state. It is hoped that future efforts will focus on primary prevention of type 2 diabetes through obesity prevention for high-risk groups.

R. TOBACCO CONTROL PROGRAM

In 1993 the LOUISIANA OFFICE OF PUBLIC HEALTH TOBACCO CONTROL PROGRAM was formed to effect environmental and policy changes geared toward making tobacco use less socially acceptable. The program seeks to accomplish this by providing community and statewide partnership grants and mini grants to communities to coordinate community planning and capacity-building activities regarding tobacco prevention and control. The program organizes conferences and/or workshops that advocate a tobacco-free environment by providing health education on the dangers of using tobacco and encouraging community involvement in further health education. Communities are able to access a wealth of information and educational

material through the TOBACCO CONTROL PROGRAMS Tobacco Control Resource Center. Evaluating and monitoring the progress of all community and statewide tobacco initiatives is an essential component of the program=s comprehensive process.

OPH-TCP Is committed to promoting partnerships and using research-based strategies for tobacco prevention, control, and awareness. Its goal is to empower citizens to make healthy lifestyle choices that lead to a ATobacco-Free Louisiana.@

The program=s comprehensive plan is based on the CENTERS FOR DISEASE CONTROL=S (CDC) nine ABest Practices@ for Comprehensive Tobacco Control Programs:

- Community Programs to Reduce Tobacco Use
- Chronic Disease Programs to Reduce the Burden of Tobacco-Related Diseases
- School Programs
- Enforcement
- Statewide Programs
- Use of Strategic Media
- Cessation Programs
- Surveillance and Evaluation
- Administration and Management

The Goals Of The Program Are:

- Prevent non-smokers from smoking;
- Help current smokers stop;
- Prevent exposure to second hand smoke; and
- Eliminate disparities among racial, ethnic, and income groups.

The Strategies Used For The Goals Are:

- Community Interventions
- Strategic Use of Media
- Program Policy
- Surveillance and Evaluation

Programs Targeting Substance Abuse

S. ALCOHOL, DRUG, TOBACCO, AND PREVENTION ADDICTION SERVICES

The Impact of Substance Abuse: OAD Services

Substance abuse has been called the nation's number one health problem[1]. Research indicates that substance abuse is associated with poor health, disruptive social relations, decreased work productivity, violence, crime, and child abuse. A report on chronic diseases and causes of death explains that chronic diseases are often complicated by lifestyles and

[1] *Using Social Indicators to Estimate Substance Abuse Treatment Needs in Louisiana.* July 1998.

environment[2]. The actual leading causes of death in the United States are tobacco, poor diet/physical inactivity, and alcohol use (McGinnies & Forge, 1993). Since 1989, more individuals have been incarcerated for drug offenses than for all violent crimes, and most violent crime is committed by drug and alcohol abusers. Alcohol and drug abuse is implicated in three-quarters of all spouse abuse, rapes, child molestation, suicides, and homicides (THE NATIONAL CENTER ON ADDICTION AND SUBSTANCE ABUSE, Columbia University, 1996). From Boston to Baton Rouge and New Orleans, hospital emergency rooms overflow with victims of gunshot wounds and other violence caused by alcohol abuse and drug addiction. AIDS and tuberculosis spread rapidly, and intravenous drug users and crack addicts are among the primary carriers of these diseases. Exchanging sex for drugs, practicing unsafe sex, and sharing dirty needles are high-risk behaviors contributing to increasing prevalence and incidence rates of morbidity.

CESAR (a weekly fax from the CENTER FOR SUBSTANCE ABUSE RESEARCH, supported by the GOVERNOR'S OFFICE ON CRIME CONTROL AND PREVENTION) highlights significant findings in the field of addictive disorders and gives scientific validation to the premises presented above. The death rate for drug-induced causes has increased every year since 1990, reaching 5.6 deaths per 100,000 population in 1997. While drug-induced deaths for both males and females are rising, the death rate for males is 2.4 times greater than for females, and raising more steeply. Among males, this figure was 8.4 per 100,000 in 1997, up from 4.9 in 1990. Among females, the drug-induced deaths rate was 3.6 in 1997, up from 2.8 in 1990.The category drug-induced causes includes death from dependent and non-dependent use of both legal and illegal drugs, as well as poisoning from medically prescribed and other drugs (CESAR, July 17, 2000, vol. 9, Issue 28). Between 50% and 77% of male adult arrestees tested positive for at least one illicit drug in 1999, according to data from 34 cities participating in a National Arrestee Drug Abuse Monitoring (ADMA) program. Marijuana was the drug most frequently detected in 24 sites, followed by cocaine in the remaining 10 sites. Cocaine dependent persons treated in long-term residential and outpatient drug-free programs generated reductions in crime that more than offset the cost of the treatment according to data from the national Drug Abuse Treatment Outcomes Study (DATOS). The average cost of crime among these cocaine-addicted clients decreased 78% from the year before to the year after long-term residential treatment resulting in a $21,360 average benefit per client. This is nearly twice the average treatment cost per episode of $11,016. Outpatient drug-free clinics experienced slightly less savings. The average cost of crime decreased 28% from the year before to the year after treatment, resulting in a $2,217 average benefit per client -1.5 times the cost of treatment. It was noted that these figures may understate the economic benefits of treatment because other areas commonly improved by treatment, such as employment and health were not included in the study (CSAT by Fax, July 19, 2000, Vol. 5, Issue 10)[3].

Less than 1/5 (18%) of child passengers who died while being transported by a drinking driver were restrained in the fatal crash, according to an analysis of data from the National Highway Traffic Safety Administration (CESAR, August 21, 2000 vol. 9 issue 33). In all age groups, child passenger restraint use decreased as the blood alcohol concentration of the child's driver increased. Older children were least likely to have been restrained.

Smokers who begin smoking at a younger age will significantly more likely than those who begin smoking at a later age to report lifetime drug use and dependency. According to the 1999 National Household Survey on Drug Abuse, the mean age of first cigarette use is currently 15.4 (CESAR September 25, 2000 vol. 9 issue 38).

[2] *Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death 1999* . U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.

[3] *CSAT by Fax* is a bi-weekly publication produced and distributed by facsimile under the Knowledge Application Program (KAP), US Department of Health and Human Services

Louisiana's substance abuse health care picture resembles that of the nation. Tobacco use was cited as a leading actual cause of death (played a significant role in cancer, heart disease, stroke, vascular, and respiratory disease) in 1994 in Louisiana (CHRONIC DISEASE CONTROL PROGRAM, 1998). One of every five deaths was attributable to tobacco use. The LOUISIANA OFFICE OF COMMUNITY SERVICES, which provides child welfare services, estimates that, currently, up to 75% of the families receiving Child Protective Services interventions have some substance abuse involvement. A cumulative report from the DEPARTMENT OF SOCIAL SERVICES (DSS) indicates that for SFY 2000, 78,516 recipients have been referred under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. OAD tracking records show 623 total referrals for SFY 2000 (<1%) of the total screened by DSS). A cumulative report from July 21, 1998 to December 31, 2000 indicates they were 554 individuals placed in substance abuse treatment. For the 3 years following inception of the program, approximately 55% of those referred did not show for treatment. The DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS reports that approximately 75% of incarcerated adults have substance abuse problems.

Because of the high prevalence and devastating social, health, and economic impact/cost of substance abuse, the state and the federal government give high priority to prevention and treatment efforts. The OFFICE FOR ADDICTIVE DISORDERS, the single state authority for substance abuse, operates through a regionalized Community Service District (C.S.D.)/Regions substructure. There are 10 administrative regions (or CSD's) of approximately 450,000 to 500,000 inhabitants each. There is an independent district (Region X), under the jurisdiction of the Jefferson Parish Authority, and effective July 1, 1997, the Capital Area Human Services District (C.A.H.S.D.) assumed responsibility for the community-based substance abuse, mental health, and developmental disabilities services previously provided by DHH in the parishes comprising Region 2. Region 1 and Regions 3-9 are directly operated by the State.

Prevention programs address the individual, interpersonal, social, and environmental influences that cause an individual to abuse alcohol and other drugs. Prevention program activities must include three of the following six strategies: Information Dissemination, Education, Alternatives, Problem Identification and Referral, Community-Based Process, and Environment. Prevention services have the additional responsibility of the Synar Initiative, a community development and educational program developed to comply with the Federal and State laws regarding tobacco sales to individuals under the age of 18. The December 1996 baseline found 75% of retailers to be in non-compliance. The OFFICE FOR ADDICTIVE DISORDERS implemented programs to educate tobacco vendors regarding tobacco sales to minors. Enforcement efforts via compliance checks are conducted by the OFFICE FOR ALCOHOL TOBACCO CONTROL through a contract agreement with the OFFICE FOR ADDICTIVE DISORDERS. The federal mandate was to reduce the illegal sales of tobacco to minors from 75% to 20% over a five-year period. The current rate of non-compliance stands at 6.5%. Louisiana met the federal goal in 18 months.

The OFFICE FOR ADDICTIVE DISORDERS (OAD) has received funding from the Office of Public Health to develop and implement a statewide Tobacco Cessation Program for OAD clients. OAD will offer a Tobacco Cessation Program in outpatient and inpatient substance abuse facilities. The program is based on Hazelden's Your Next Step Tobacco Cessation Program. This program incorporates the 12th Step model for treating chemical dependency. Nicotine patches will be provided as a component of this program.

Prevention specialists coordinate prevention services in each of the Regions and implement community-based primary prevention strategies. Research indicates that alcohol, tobacco, and other drug (ATOD) use, delinquency, school achievement, and other important outcomes in adolescence are associated with specific characteristics (i.e., risk or protective factors) in the students' communities, schools, family environments, and individual characteristics. Evidence

indicates that exposure of adolescents to a greater number of risk factors, irrespective of what the specific risk factors are, is associated with more substance use and delinquency, while exposure to more protective factors is associated with lower prevalence of these behaviors.

The analysis of risk and protective factors is the most powerful paradigm available for understanding the genesis of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed[4]. Under the sponsorship of the CENTER OF SUBSTANCE ABUSE PREVENTION (CSAP), the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS contracted with DEVELOPMENTAL RESEARCH AND PROGRAMS, INC., of Seattle, Washington conducted a survey of sixth, eighth, tenth, and twelfth grade students. Students were surveyed using the *Communities that Care® Youth Survey (CTC Survey)*. The CTC survey was developed to provide scientifically sound information to communities on the prevalence of risk and protective factors among youth. The survey data were collected November 1998 through January 1999 in Louisiana public and private schools. A risk and protective factor profile was developed for Louisiana students. Results showed Louisiana students to be above the national average for all but two of the protective factors. There was only one protective factor, Opportunities for Positive Involvement in the Community, for which Louisiana students scored significantly lower than both the National Comparison average and the CTC matched comparison. The next lowest protective factor was School Rewards for Prosocial Involvement. The most elevated risk factor was in the school domain, Academic Failure, which measures students' self-reports of their academic performance. Other risk factors that were significantly higher than the national average were Friends, Delinquent Behavior and Impulsiveness, and Poor Family Discipline. Results of the survey are posted on the office's web page. It is important to note, the survey points out, that both risk and protective factors must be addressed for a program to be successful. OAD plans to conduct a follow-up Louisiana Youth Survey in collaboration with the Southwest Center for Application of Prevention Technologies, University of Oklahoma. The survey will be conducted in the school system beginning, February 2001. This survey will be used to determine the areas most in need, as well as the type and intensity of programs to be implemented. It will also enable the State to transition into a model conducive to research-based programming. Beginning with the implementation of the State Incentive Grant (SIG), OAD is looking to fund research-based programs that will address Risk and Protective Factors, as indicated by information obtained from the Louisiana Youth Surveys. Once the data has been collected and analyzed, there will be a base for comparison for the initial data collected in 1998.

The DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS was awarded a second block grant from the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention to enforce the underage drinking laws. The grant funds were used for development of a central collection center for alcohol violations and other community programs aimed at educating the public about underage drinking. In the Spring of 2000, unannounced inspections of alcohol vendors were conducted and results of these checks were compiled to compute the State's rate of alcohol sales to minors. The current rate of sale to minors for on-premise alcohol retailers is 13.4% and for off-premise alcohol retailers is 11.7%.

The OFFICE FOR ADDICTIVE DISORDERS have been designated by the Office Of The Governor to administer and implement the Center for Substance Prevention's State Incentive Grant (SIG). The grant award is in the amount of $8.4 million for a 3-5 year period. The SIG grant is a cornerstone of the National Youth Substance Abuse Prevention Incentive (NYSAPI). It was established to assist state governors with enhanced capabilities to coordinate, leverage, and implement effective prevention strategies as well as a statewide prevention plan for its citizens.

[4] *Communities that Care® Youth Survey.* May 1999.

The OFFICE FOR ADDICTIVE DISORDERS (OAD) provides a continuum of treatment services: detoxification, inpatient, community-based, residential, and outpatient. These treatment services provide assessment, diagnosis, and treatment of alcohol abuse, alcoholism, drug abuse, and drug addiction. In addition, OAD provides services in three programs: Drug Courts, Compulsive Gambling, and DWI treatment. Federal funding mandates require that the Office provide specialized services to pregnant women, women with dependent children, intravenous drug users, and those infected with HIV.

OAD continues to participate in a collaborative project between the OFFICE OF PUBLIC HEALTH (OPH) and THE OFFICE OF MENTAL HEALTH (OMH) to provide services to the school-based health centers in the State. An interdepartmental agreement for School Based Health Centers (SBHC) was approved by the Assistant Secretaries of OAD, OMH and OPH. This agreement will afford each Office an opportunity to provide prevention and early intervention services to children and adolescents served by SBHC.

Programs Targeting Intentional and Unintentional Injury

T. VIOLENCE PREVENTION

The INJURY RESEARCH AND PREVENTION PROGRAM provides local data, educational resources, best practice and evaluation assistance to community groups targeting violence prevention. Staff help organize training events, presentations, access to key agencies, and inter-agency mentoring and coordination to promote the creation of local groups where none exist.

INJURY RESEARCH AND PREVENTION staff are collaborating with law enforcement and other community groups in a large urban area to test new methods for decreasing domestic violence. The staff are collecting baseline data for comparison purposes, and will provide specific training to 911 operators and other law enforcement individuals. At intervals, information on performance objectives and outcomes will be collected for comparison with the pre-intervention time period. A successful outcome will provide opportunities for staff to promote these methods, including the evaluation procedures, to other law enforcement venues.

Prevention of sexual assaults through support of local and statewide volunteer agencies is an ongoing project of the INJURY RESEARCH AND PREVENTION PROGRAM. In addition to direct services for victims, the agencies also work to achieve coordination within the medical and legal systems to minimize continued victim trauma. The INJURY RESEARCH AND PREVENTION PROGRAM provides information on outreach to media, faith communities, athletics, business, universities, and other groups who can use their authority to change community norms about violence toward women and children.

U. PERSONAL FLOTATION DEVICES

The combination of natural bodies of water, swimming pools and drainage canals, leads to higher than average numbers of injuries and deaths from drowning in Louisiana. Staff from the INJURY RESEARCH AND PREVENTION PROGRAM performed an observational survey of boaters in conjunction with the DEPARTMENT OF WILDLIFE AND FISHERIES. Only a small percentage of boaters used personal flotation devices, such as life jackets, which are known to save lives. As

an adjunct to featuring the outdoor opportunities for visitors, advertising visuals should include safety equipment in use. Other opportunities for prevention education exist in visuals used in point-of-sale materials in sporting goods stores and swimming pool vendors.

Reports
A report on this survey, accompanied by recommendations, is available from the Injury Research and Prevention Program.

V. DOG-BITE INJURIES

The INJURY RESEARCH AND PREVENTION PROGRAM in collaboration with local veterinarians, the local animal shelter, and hospital emergency rooms has reviewed cases of dog-bites severe enough to require hospital attention. The survey showed that more than half of the bites occurred to children under the age of 14, and involved a dog that they knew rather than a stray. Based on the data collected, it is estimated that around 2% of the population receive dog-bites annually.

Reports
A report on the outcome of this surveillance, accompanied by information on avoiding dog bites, is available from the INJURY RESEARCH AND PREVENTION PROGRAM.

Programs Targeting Mental Health

W. SUICIDE ASSESSMENT

Mental Health professionals conduct a suicide assessment of any consumer who presents to the system with emotional or behavioral problems, or with symptoms of severe mental illness. Additionally, all paraprofessionals who work with the mentally ill client are trained in the mental health assessment of potential suicide. These assessments include current ideations of self-harm, plans for self-harm, and whether the consumer has the means to harm him/herself. Immediate steps are taken to protect that individual when indicated by the mental health assessment of suicide potential. Additionally, the assessment includes past history of suicidal ideation, an assessment of the severity of previous attempts, and the emotional and environmental factors surrounding previous suicidal issues for the consumer.

The OFFICE OF MENTAL HEALTH provides a comprehensive crisis intervention program throughout the state for all citizens who may experience thoughts of suicide, as well as other signs and symptoms of a mental health crisis. This system includes crisis phone lines with 1-800 numbers, a Single Point of Entry system for those who need face-to-face evaluation, hospital diversionary programs (such as respite), or acute hospitalization.

X. PROGRAMS OF THE OFFICE OF MENTAL HEALTH

Acute Unit

The acute care psychiatric inpatient units provide psychiatric, psychosocial, and medical services in compliance with all licensing and accreditation standards to meet the individualized patient care needs of adults and adolescents in the State of Louisiana who need a level of care that must be rendered in an inpatient setting. These units address the need for inpatient treatment in a less restrictive, shorter term, more cost effective setting than in the State longer term care psychiatric facilities.

Specialized Inpatient Services

The OFFICE OF MENTAL HEALTH operates four state psychiatric facilities which provide mental health evaluation, treatment, and rehabilitation services to adults with severe and persistent mental disorders and child/adolescent clients with serious emotional/behavioral disorders.

Clinic-based Services

OMH currently has a caseload of over 43,000 adults with serious and persistent mental illness and children and youth with serious emotional disturbances receiving outpatient mental health services through the operation of licensed Community Mental Health Centers (CMHC) and their satellite outreach clinics located throughout the eight OMH geographic regions and the two service district regions. The CMHC facilities provide an array of services: screening and assessment; emergency crisis care; individual evaluation and treatment; medication administration and management; clinical casework services; specialized services for children and adolescents; specialized services for criminal justice; specialized services for the elderly; and pharmacy services. Inability to pay does not have an impact on the receipt of services.

Crisis Management Services

Crisis services are provided on a 24-hour basis. These services are designed to provide a quick and appropriate response to individuals who are experiencing acute distress. Care services include telephone counseling and referrals, face-to-face screening and assessment, community housing for stabilization and crisis respite.

Day Programs and Psychosocial Rehabilitation Programs

Psychosocial programs and day treatment programs provide opportunities for teaching new rehabilitative skills related to community living and work activities; build networks of peer support; teach self-help community activities; and provide a place where individuals can learn how to relate to persons and communicate their needs and desires successfully. In addition, day programs provide secure, structured environments where individuals experiencing disruption in routine behaviors brought on by their illness can receive treatment and support. Day programs also provide structured activities which allow children and adolescents with severe emotional disturbances to remain in school.

Support Services

Supported living services, either through specialized residential programs or through case management and other services which support persons living in their own homes, are available throughout the State. Individuals with serious psychiatric disabilities are provided with services necessary to address both their housing and mental health/rehabilitative needs.

Programs Targeting Environmental Health

Y. Community Water Fluoridation

Currently, 54.9% of the population served by public water systems are serviced by optimally fluoridated water systems. Renewed effort has been undertaken toward reaching the Centers for Disease Control Healthy People 2000 goal of optimally fluoridating 75% of the population's water supply.

Community water fluoridation efforts have been re-established with recent legislation, ensuring a stable Office of Public Health Fluoridation Program. The program will oversee monitoring and evaluation of current systems, provide training and assist in promotional activities, together with the Oral Health and Environmental Health Programs of the Office of Public Health and the newly established Fluoridation Advisory Board. This board will function to secure additional resources needed to implement fluoridation systems created as a result of promotional activities.

Thus far, the parish of Plaquemines and the town of Amite, Louisiana have recently passed council ordinance to implement community water fluoridation with the potential to reach an additional 31,000 Louisiana residents.

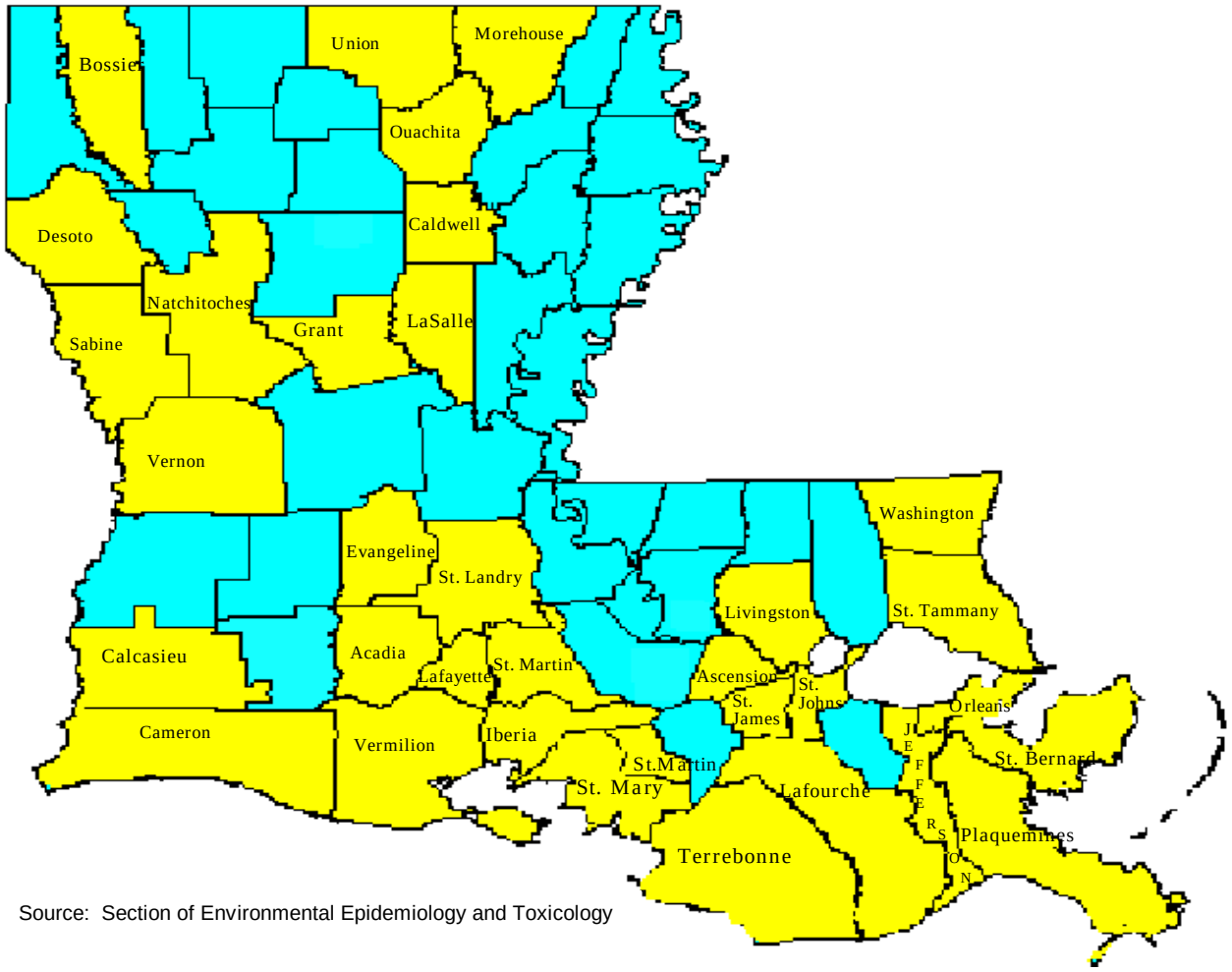
Z. Environmental Health Advisories

The Louisiana Department of Health and Hospitals Section of Environmental Epidemiology and Toxicology (SEET) issues fish consumption advisories in consultation with state environmental agencies when chemicals or heavy metals in sport fish reach levels that could potentially harm the public.

Mercury in Fish

SEET works with the Louisiana Department of Environmental Quality (LDEQ) to assess the extent of mercury contamination in fish. Methyl mercury, a metal compound sometimes found in fish, can cause birth defects and neurological problems when present at high levels. LDEQ collects and samples fish from water bodies that are selected based on their pH, usage, and SEET recommendations. SEET's Health Advisor then coordinates a risk analysis, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of over 100 water bodies tested to date, 21 health advisories for fish containing mercury have been issued. These advisories cover 18 freshwater bodies in or traversing 33 parishes (see map below), including an advisory on king mackerel for parishes along the Gulf of Mexico.

Louisiana Parishes with Mercury-Related Fish Advisories as of December 31, 2000



Source: Section of Environmental Epidemiology and Toxicology

AA. ENVIRONMENTAL HEALTH EDUCATION

Health Effects Related to Pesticide Exposure

In an effort to educate Louisianans about pesticides, a multi-agency workgroup developed a pamphlet for statewide distribution. The pamphlet, What You Need to Know About Pesticides and Your Health in Louisiana, was jointly developed by SEET, the LOUISIANA DEPARTMENT OF AGRICULTURE AND FORESTRY (LDAF), and the LOUISIANA ENVIRONMENTAL ACTION NETWORK (LEAN). The U.S. Environmental Protection Agency funded printing and distribution costs.

The pamphlet discusses health effects related to commonly used pesticides, how pesticide exposure occurs, what to do if you are exposed to a pesticide, laws regulating the use and application of pesticides, and how to file a Health-Related Pesticide Incident Report.

Distribution of the pamphlet will occur through parish health units, state libraries, the Louisiana Cooperative Extension Service, colleges and universities, and organizations and agencies working in the area of environmental health.

Mercury in Fish

SEET, ENVIRONMENTAL QUALITY, WILDLIFE AND FISHERIES and AGRICULTURE AND FORESTRY entered into an interagency agreement in 1997 to determine jointly which water bodies in the state needed health advisories based on levels of environmental contamination, particularly from mercury. Also that same year, the Louisiana legislature provided funding to assess mercury levels in recreationally caught fish and to offer free blood screening services in parishes where high levels of mercury had been identified.

The agencies, working with representatives of the SIERRA CLUB and the Louisiana AUDUBON COUNCIL, produced two informative brochures, one for the general public and the other directed specifically toward pregnant or breastfeeding women and mothers of small children. The publications were widely distributed throughout Louisiana, including distribution through obstetrician/gynecologists' and pediatricians' offices and parish health units.

The environmental organizations continue to work closely with the legislature and the state departments to inform the public about the potentially deleterious effects of mercury and other contaminants on people's health.

Health Professional Education

SEET conducts Health Professional Education as part of its educational activities. SEET targets physicians and other health professionals located near Superfund and proposed Superfund sites to receive case studies from the AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (ATSDR). Information provided focuses on site contaminants, health effects from exposure, and clinical descriptions of the diagnosis and management of cases of chemical exposure.

Since 1996, SEET has disseminated ATSDR (AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY) Case Studies to over 4,000 Louisiana physicians in 20 parishes. The most recent mail-out occurred in February of 1998 when SEET distributed ATSDR Case Studies entitled "Mercury Toxicity" and "Taking Exposure History" to 750 physicians in 10 parishes.

Public Health Response for Chemical Spills

Thousands of accidental releases, explosions, and other chemical releases occur each year in Louisiana. SEET evaluates the public health threat of selected events and provides needed information and recommendations to the affected communities, hospitals, and physicians treating exposed individuals.

Hazardous Substances Emergency Events Surveillance Project

In August of 2000 the Louisiana Office of Public Health, Section of Environmental Epidemiology and Toxicology (SEET) was awarded funds from the Agency for Toxic Substances Disease Registry (ATSDR) to participate in their Hazardous Substances Emergency Events Surveillance (HSEES) project. Fourteen other states also participate in this project. SEET collects information, which is entered into a comprehensive database. This database addresses hazardous substance spills, air releases, threatened releases and spills, and associated health consequences including evacuations, injuries and deaths. The database expands upon spill data collected by the National Response Center, the Department of Environmental Quality as well as the Louisiana State Police. SEET collects additional information, which focuses on the impact of spills on the population i.e., injuries, medical care, evacuations, in-place sheltering, and community emergency planning.

The Hazardous Substances Emergency Events Surveillance System's ultimate purpose is to prevent exposure and adverse human health outcomes and diminished quality of life from exposure to hazardous substances. In collecting these health specific data SEET hopes to prevent further health consequences from hazardous releases/spills in Louisiana.

Medical Assessment Team (MAT)

Repeated occurrences of spills and other accidental hazardous substance releases in Louisiana have underscored the need for timely public health response in these events. THE DEPARTMENT OF HEALTH AND HOSPITALS is addressing this need by piloting a Medical Assessment Team (MAT) for hazardous substance emergencies. Currently in its formative stages, the MAT will support state and local response efforts on an as-needed basis. Exposure assessment, risk assessment, risk communication, and epidemiologic surveillance comprise the MAT's core functions. The MAT will assess the nature and severity of toxic exposures based on available environmental and medical data. MAT members will obtain and provide information about the hazardous substance(s) to local emergency departments at the time of the event. MAT experts will determine and recommend appropriate tests for exposure to treating physicians and hospitals. Collections and analysis of these data will allow subsequent health risk assessment and communication to the affected public. The MAT will devise and coordinate medical follow-up, when indicated. Local government officials will be briefed, and the team will attend public meetings to address the community's concerns.

V. LOUISIANA STATE HEALTH CARE SYSTEM

A. ANALYSIS OF HEALTH CARE IN LOUISIANA

A 1999 national report by ReliaStar Financial, formerly Northwestern National Life, shows Louisiana at the bottom of the list of healthiest states. Louisiana's 50th ranking is similar to its ranking of 48th and 49th the last two years. The report is based on 17 criteria, including disease rate, access to health care, occupational safety and disability, crime rate, motor vehicle death rate, and other mortality rates and data from 1998. Louisiana's ranking as the most unhealthy state stems from its high violent crime rate, high unemployment, poor access to primary care, high number of limited activity days, high rate of heart disease, high total mortality and high premature death. Louisiana ranks in the bottom 10 on 10 of the 17 measures. Support for public health care has increased from 35 percent to 12 percent below the national average but still lags behind other states. Since 1990, Louisiana has failed to match national improvements in prevalence of smoking and has seen an increased risk of heart disease, the report says.

A major explanation for Louisiana's poor health status is the lack of access to routine and preventive health care. In *Health Care State Rankings for 2000* [1], Louisiana ranked 49th, second worst in the nation in health indicators. According to this report, Louisiana ranked 1st in the nation in diabetes death rate (38.7 deaths per 100,000 population) and 2nd in the percent of births by cesarean section (25.4% of live births). Louisiana's performance related to prenatal care is dismal, with Louisiana ranking 1st in the percentage of low birth weight babies (10.1% of live births), 6th in the rate of neonatal deaths (6.2 neonatal deaths per 1,000 live births), and 5th in the rate of infant mortality (9.1 infant deaths per 1,000 live births). Louisiana ranks 15th in the percent of women receiving late or no prenatal care and 28th in the percent of African-American women receiving prenatal care in the first trimester. Similarly, Louisiana's breast cancer and cervical cancer rates for African-American women exceed the national rates. The rate for white women is generally below the national norm.

Accessibility and availability of primary care practitioners (family practice, general practice, internal medicine, pediatrics, and obstetrics/gynecology) also pose a significant problem in the delivery of health care in the state. As of January 2001, the BUREAU OF HEALTH CARE DELIVERY AND ASSISTANCE recognizes 66 primary care shortage areas in the state: 26 geographic areas, 20 population groups, 14 sub-areas, and 6 facilities. Of the 26 whole-parish designations, 24 are non-metropolitan parishes.

In lieu of a primary care physician, many people seek care at hospital emergency rooms. In 1998 Louisiana ranked 15th highest nationally in the number of emergency outpatient visits to community hospitals. There were 2,254,789 emergency outpatient visits to hospitals in Louisiana, as compared with the national average of 1,858,262 visits.

In addition to confirming the shortage among physicians and nurses, other occupations identified as posing a general supply problem in the state include dentists (in *Health Care State Ranking 2000*. The American Dental Association statistics report 44 dentists per 100,000 population in Louisiana in 1998 - lower than the national rate of 60), hygienists, physician assistants, pharmacists, nutritionists, audiologists, social workers, public health personnel, physical therapists, and medical technologists.

Louisiana has attempted to address the problems associated with health professional shortages over the years in many ways. State schools of medicine, nursing schools, and schools of allied health professions have been mandated to cooperate, in collaboration with the Louisiana Area

[1] Morgan, K.O. and Morgan, S. (Eds.) 2000. *Health Care State Rankings 2000: Health Care in the 50 United States* . (8th Ed.) Lawrence, KS: Morgan Quitno Press.

Health Education Centers, to improve and expand programs for non-metropolitan and other health professional shortage areas. Hundreds of thousands of dollars of state funds have in the past been allocated to capture federal dollars for professional development initiatives, including scholarship programs for students who will return to health professional shortage areas, and loan repayment programs for medical professionals to practice in shortage areas in exchange for payment of professional education loans. However, during FY 99/00 only continuation funding was appropriated to continue the contracts with the health care providers through the State Loan Repayment Program (SLRP). The SLRP is a program with federal dollars that match the state investment in recruitment and retention of health care providers to serve underserved people.

Louisiana **must continue** aggressively to attack the health professional shortage problem to meet the existing health needs of its residents. Lack of access to appropriate care in their communities is resulting in many ill persons becoming patients at state hospitals. These same individuals could be served better if there were more outpatient primary care facilities available and accessible in their own areas. Ensuring appropriate and adequate primary care facilities can take place only if there are available physicians, nurses, and other health care professional to staff the facilities, and state financing to support these providers.

B. LOUISIANA HEALTH CARE STATISTICS

Percent of State Population Receiving Medicaid in 1998[2]	
Alabama	11.7%
Arkansas	13.1%
Louisiana	17.3%
Mississippi	14.0%
Texas	8.7%
United States	11.1%
Percent of State Population Not Covered by Health Insurance in 1998[2]	
Alabama	17.0%
Arkansas	18.7%
Louisiana	19.0%
Mississippi	20.0%
Texas	24.5%
United States	16.3%
Number of Emergency Outpatient Visits to Hospitals in 1998[2]	
Alabama	1,905,603
Arkansas	931,213
Louisiana	2,254,789
Mississippi	1,425,892
Texas	6,722,059
United States	94,771,405
Percent of State Population Enrolled in Medicare in 1998[2]	
Alabama	15.2%
Arkansas	17.0%
Louisiana	13.6%
Mississippi	14.8%
Texas	10.9%
United States	13.9%
Number of Health Maintenance Organizations (HMOs), Louisiana, 1999[3]	15
Percent of Population Enrolled in HMOs, Louisiana, 1999	17.7%
Number of Preferred Provider Organizations (PPOs), Louisiana, 1994/1995	30 / 26
Percent of Population Enrolled in a PPO, Louisiana, 1993/1994	15.5% / 44.2%
Number of Nurses, Louisiana, 1999[4]	41,540
Number of Physician Assistants, Louisiana, 2000[4]	245

[2]Morgan, K.O. Morgan, S. and Uhlig, M. (Eds.). 2000. *Health Care State Rankings 2000 : Health Care in the 50 United States* (8th Ed.) Lawrence, KS: Morgan Quitno Press.

[3]Office of Public Health.

[4]Louisiana Board of Nursing.

C. Louisiana Health Care Access

Number of Hospitals and Beds Louisiana, 1998		
Type of Hospital	**Hospitals**	**Beds**
Acute	117	20,333
Children's	2	246
Critical Access	1	25
Long Term	21	1,622
Psychiatric	18	2,408
Rehabilitation	15	542

Source: Health Resource Management, Office of Public Health

Health Facilities Louisiana, 1998	
Type of Facility	**Number**
Alcohol/Drug Abuse Facilities	72
Community Health Centers	23
State Developmental Centers	9
Hospitals	174
Mental Health Clinics	43
Rural Health Clinics	61
Public Health Units	109

Source: Health Resource Management, Office of Public Health

Nursing Home Statistics Louisiana, 1998	
Number of Nursing Homes	352
Number of Beds	
Licensed Beds	40,953
Medicaid	37,697
Average Occupancy (Medicaid)	80.9%

Source: Health Resource Management, Office of Public Health

Lack of Access to Primary Care* Louisiana, Neighboring States, and United States, 1999		
State	**Percent**	**Rank****
Alabama	22.1	3
Arkansas	12.4	16
Louisiana	23.1	2
Mississippi	26.7	1
Texas	11.3	20
United States	9.4	-

*Lack of Access to Primary Care measures the percent of population areas where the population is underserved by primary care practitioners residing in designated Health Manpower Shortage Areas.

**Rank reflects worst (lowest) to best (highest).

Source: Morgan, K.O. and Morgan, S (Eds.). 2000. Health Care State Rankings 2000: Health Care in the 50 United States. (8th Ed.) Lawrence, KS: Morgan Quitno Press.

Source: Health Resource Management, Office of Public Health

D. MEDICAID

Medicaid, or Title XIX of the Social Security Act, became law in 1965 as a jointly funded cooperative venture between the federal and state governments. Its purpose was to assist states in the provision of adequate medical care to eligible individuals and families with low incomes and resources. Within broad, federally provided national guidelines, Louisiana has autonomy in establishing its own eligibility standards; determining the type, amount, duration, and scope of services; setting the rate of payment for services; and administering its own program.

As the largest provider of medical and health-related services to America's poorest people, Medicaid includes funding for these basic health care programs: inpatient and outpatient hospital services; laboratory and X-ray services; skilled nursing and home health services; doctors' services; family planning; and periodic health checkups, diagnoses, and treatments for children.

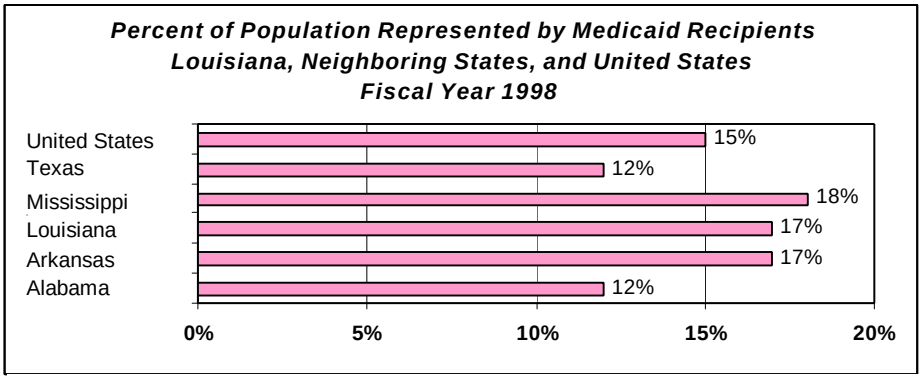
Medicaid recipients fall into several categories of eligibility: the aged, blind and disabled people on Supplemental Security Income, certain low-income pregnant women and children, and people who have very high medical bills. In fiscal year 1998 (the most recent year for which the HCFA-2082 report has been published) over 720,000 Louisianians benefited from services provided through Medicaid funding.

Number of Medicaid Recipients by Basis of Eligibility
Louisiana, Neighboring States, and United States, Fiscal Year 1998

State	Total Number of Recipients	Age 65 and Older	Blind/ Disabled	Children	Adults	Other/ Unknown
Alabama	527,078	64,651	145,892	262,547	48,049	5,939
Arkansas	424,727	50,746	96,507	179,405	85,023	13,046
Louisiana	720,615	93,838	160,544	345,723	120,369	141
Mississippi	485,767	60,567	131,439	218,491	61,217	14,053
Texas	2,324,810	301,368	288,293	1,327,276	391,786	16,087
United States	40,649,482	3,964,223	6,637,980	18,309,145	7,907,935	3,830,199

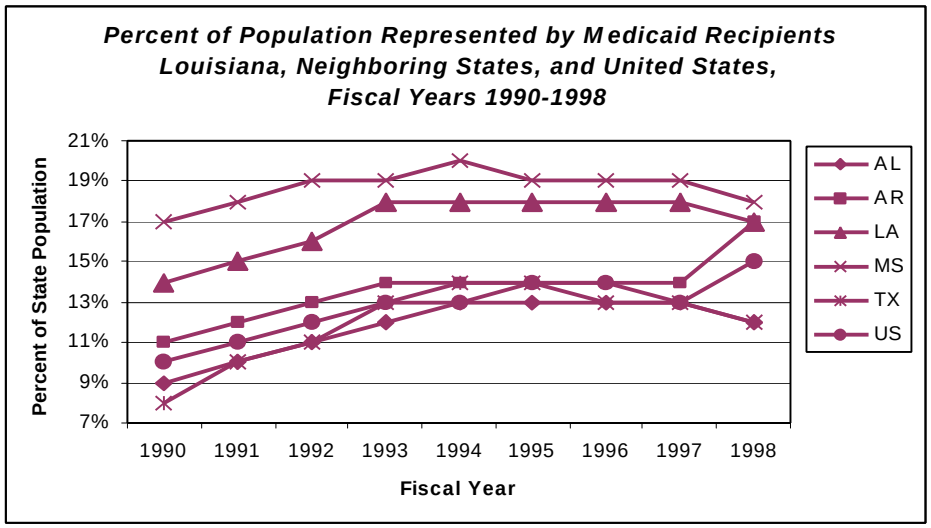
Source: U.S.Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The total number of Medicaid recipients in Louisiana in fiscal year 1998 is the equivalent of 17% of the state's population, a figure approximately 2% higher than that seen in most other south-central states and in the nation as a whole.



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2080 Report for FY 1998.

The percentage of Louisiana's population represented by Medicaid beneficiaries has decreased slightly from a plateau of 18% from 1993 to 1997. Among the south-central states, only Mississippi has had a higher percentage of its population represented by Medicaid beneficiaries.



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

Of Louisiana Medicaid medical care recipients in fiscal year 1998, 61.4% were female and 38.6% were male. These figures are similar to those seen in other south-central states. For the United States as a whole, 60.3% of recipients were female and 39.7% were male.

Number and Percent of Medicaid Recipients of Medical Care by Sex
Louisiana, Neighboring States, and United States, Fiscal Year 1998

State	Male		Female	
	Number	Percent*	Number	Percent*
Alabama	196,812	37.9	322,644	62.1
Arkansas	157,095	37.1	266,608	62.9
Louisiana	278,337	38.6	442,067	61.4
Mississippi	176,349	36.7	304,322	63.3
Texas	910,233	39.2	1,414,555	60.8
United States	14,733,230	39.7	22,376,441	60.3

*Percent of all Medicaid recipients in the state. Unknown sex not included in table.

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

Like Alabama and Mississippi, the majority of Medicaid beneficiaries who received medical care in Louisiana were black (59.9%). In Louisiana, 33.2% were white, and 7.0% were of other race/ethnic groups. The race/ethnic group differences seen among the south-central states and between Louisiana and the nation as a whole reflect state-level differences in race/ethnic populations.

Number and Percent of Medicaid Recipients of Medical Care by Race Louisiana, Neighboring States, and United States, Fiscal Year 1998						
State	White*		Black*		Other**	
	Number	Percent	Number	Percent	Number	Percent
Alabama	238,107	45.2	260,790	49.5	28,181	5.3
Arkansas	257,363	60.6	141,972	33.4	25,392	6.0
Louisiana	238,916	33.2	431,382	59.9	50,317	7.0
Mississippi	151,798	31.2	298,883	61.5	35,086	7.2
Texas	645,978	27.8	458,055	19.7	1,220,777	52.5
United States	16,771,976	41.3	9,847,580	24.2	14,029,926	34.5

*Non-Hispanic

**Other includes Native American, Asian or Pacific Islander, Hispanic, and Unknown

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The two tables below present the number and percent of total Medicaid medical care recipients divided into age groups. Fifty percent of Medicaid medical care recipients in fiscal year 1998 were below 15 years of age, reflecting the importance placed on provision of health services to children. The age-group distribution of services in Louisiana was similar to that seen in surrounding states and in the nation as a whole.

Number of Medicaid Recipients of Medical Care by Age Group Louisiana, Neighboring States, and United States, Fiscal Year 1998										
State	Age Group									
	Under 1	1-5	6-14	15-20	21-44	45-64	65-74	75-84	85+	Unknown
Alabama	27,969	111,576	111,380	43,098	93,433	51,573	31,817	30,249	25,309	674
Arkansas	16,248	77,228	93,906	48,658	88,600	34,820	21,708	22,996	19,644	919
Louisiana	57,639	144,132	158,730	64,869	139,767	59,953	36,578	33,406	25,404	137
Mississippi	26,367	90,526	96,034	42,668	95,579	47,702	30,780	28,555	22,461	5,095
Texas	144,065	558,876	574,293	179,470	417,767	148,914	122,019	103,321	76,084	1
United States	1,558,643	6,933,058	8,552,786	3,770,295	8,835,632	3,329,608	1,806,516	1,577,798	1,271,386	3,013,760

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

Percent of Medicaid Recipients of Medical Care by Age Group Louisiana, Neighboring States, and United States, Fiscal Year 1998										
State	Age Group									
	Under 1	1-5	6-14	15-20	21-44	45-64	65-74	75-84	85+	Unknown
Alabama	5.3	21.2	21.1	8.2	17.7	9.8	6.0	5.7	4.8	0.1
Arkansas	3.8	18.2	22.1	11.5	20.9	8.2	5.1	5.4	4.6	0.2
Louisiana	8.0	20.0	22.0	9.0	19.4	8.3	5.1	4.6	3.5	0.0
Mississippi	5.4	18.6	19.8	8.8	19.7	9.8	6.3	5.9	4.6	1.0
Texas	6.2	24.0	24.7	7.7	18.0	6.4	5.2	4.4	3.3	0.0
United States	3.8	17.1	21.0	9.3	21.7	8.2	4.4	3.9	3.1	7.4

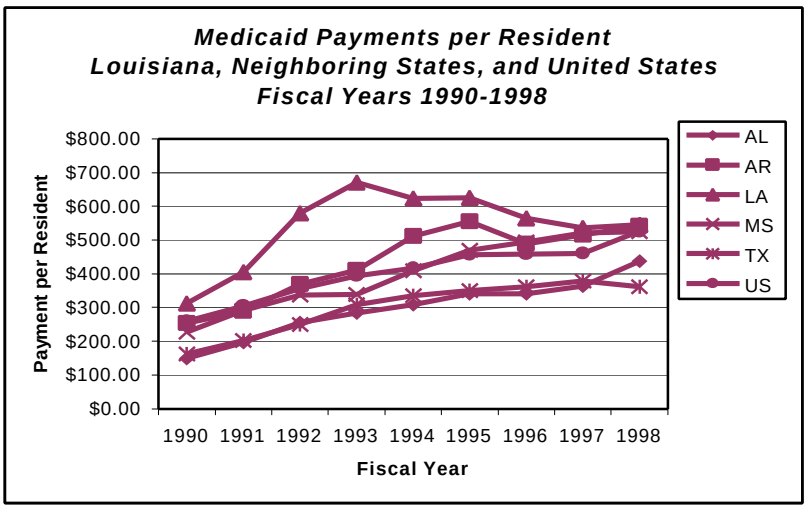
Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The total of payments made to Medicaid vendors for eligible recipients in Louisiana in fiscal year 1998 was over $2.3 billion. More than 74% of Medicaid funding went to persons who were disabled or were age 65 or over, even though half of all eligible recipients are children.

Medicaid Vendor Payments by Basis of Eligibility of Recipient Louisiana, Neighboring States, Fiscal Year 1998						
State	Total Payment	Age 65 and Older	Blind/ Disabled	Children	Adults	Other
Alabama	$1,902,300,047	$550,365,257	$597,810,766	$186,782,542	$33,684,838	$533,656,644
Arkansas	$1,375,797,421	$430,018,281	$791,182,772	$262,322,716	$99,324,540	($207,050,888)
Louisiana	$2,383,508,985	$672,322,724	$1,101,257,511	$371,500,804	$238,273,512	$154,433
Mississippi	$1,442,373,276	$415,324,517	$665,398,149	$225,920,481	$119,880,832	$15,849,297
Texas	$7,139,928,843	$2,341,889,852	$2,484,970,969	$1,397,377,640	$871,515,674	$44,174,708

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

In fiscal year 1998, Medicaid funding per state resident was higher in Louisiana than in any of the other south-central states. Medicaid payments averaged $546.00 per state resident, approximately 3.6% more than the national average of $527.00 per United States resident. This figure has declined, however, from its 1993 peak of $670.00 per state resident.



As part of the cost-saving measures available through the Medicaid program, states are making increased use of enrollment of Medicaid beneficiaries in managed care programs. The following table shows the number of enrollees in Medicaid managed care programs from 1996 through 1998. These numbers include individuals enrolled in state health care reform programs that expand eligibility beyond traditional Medicaid eligibility standards.

Number and Percent of Medicaid Managed Care Enrollees Louisiana, Neighboring States, and United States, 1996-1998						
	1996		1997		1998	
State	Number of Enrollees	Percent in Managed Care	Number of Enrollees	Percent in Managed Care	Number of Enrollees	Percent in Managed Care
Alabama	56,929	11.4%	407,643	82.0%	362,272	70.9%
Arkansas	143,232	38.6%	159,458	80.9%	186,215	56.0%
Louisiana	44,772	5.6%	40,469	6.4%	40,729	5.4%
Mississippi	35,137	6.9%	81,255	15.0%	153,562	40.0%
Texas	75,776	3.8%	275,951	13.3%	437,898	25.5%
United States	13,330,119	40.1%	15,345,502	47.8%	16,573,996	53.6%

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

E. MEDICARE

Medicare is the nation's largest health insurance program, covering over 38 million Americans at a cost of just under $200 billion. Medicare provides health insurance to people who are at least 65 years old, the disabled, and those with permanent kidney failure. People who receive Social Security or Railroad Retirement benefits are automatically enrolled when they become eligible for Medicare. Others must apply at their local Social Security offices.

Medicare has two parts: Hospital Insurance (Part A) and Medical Insurance (Part B). Medicare Part A helps pay for inpatient hospital services, skilled nursing facility services, home health services, and hospice care. Medicare Part B helps pay for doctor services, outpatient hospital services, medical equipment and supplies, and other health services and supplies.

Many Medicare beneficiaries choose to enroll in managed care plans like health maintenance organizations. These beneficiaries are eligible for both Part A and Part B benefits in most managed care plans.

As of March 1, 1998 (FY 1998 is the most recent year for which the HCFA 2082 report has been published), Louisianians enrolled in the Medicare program numbered 592,543. This number constitutes 14% of the state's population, a percentage similar to that of surrounding states and the nation as a whole.

Percent of State Population Enrolled in Medicare
Louisiana, Neighboring States, and United States, 1998

State	*Percent Enrolled*
Alabama	15.4
Arkansas	17.1
Louisiana	13.7
Mississippi	14.9
Texas	11.1
United States	14.1

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for 1998

F. PROVIDER SITES

The following pages describe the various health care facilities available to the public throughout the state of Louisiana. These facilities include the state charity hospital system, small rural and community hospitals, public health clinics, rural health clinics, Federally Qualified Health Centers (FQHCs), developmental centers, mental health clinics, mental health and rehabilitation hospitals, and substance abuse prevention clinics. Other programs such as school-based health centers, community care, and health maintenance organizations (HMOs) also are discussed.

State Charity Hospitals

The Louisiana charity hospital system currently is being operated by the LOUISIANA STATE UNIVERSITY MEDICAL CENTER. The first Charity Hospital (in New Orleans) was built in 1736. The system was expanded across the State during the administration of Governor Huey Long. Two new medical centers were added in 1978 and 1993, and two were rebuilt in the late 1970s.

Most of the charity hospitals are teaching hospitals used to train medical school, graduate, and postgraduate students from the Louisiana State University (LSU) Schools of Medicine and Nursing, as well as other professional educational institutions.

Small Rural and Community Hospitals

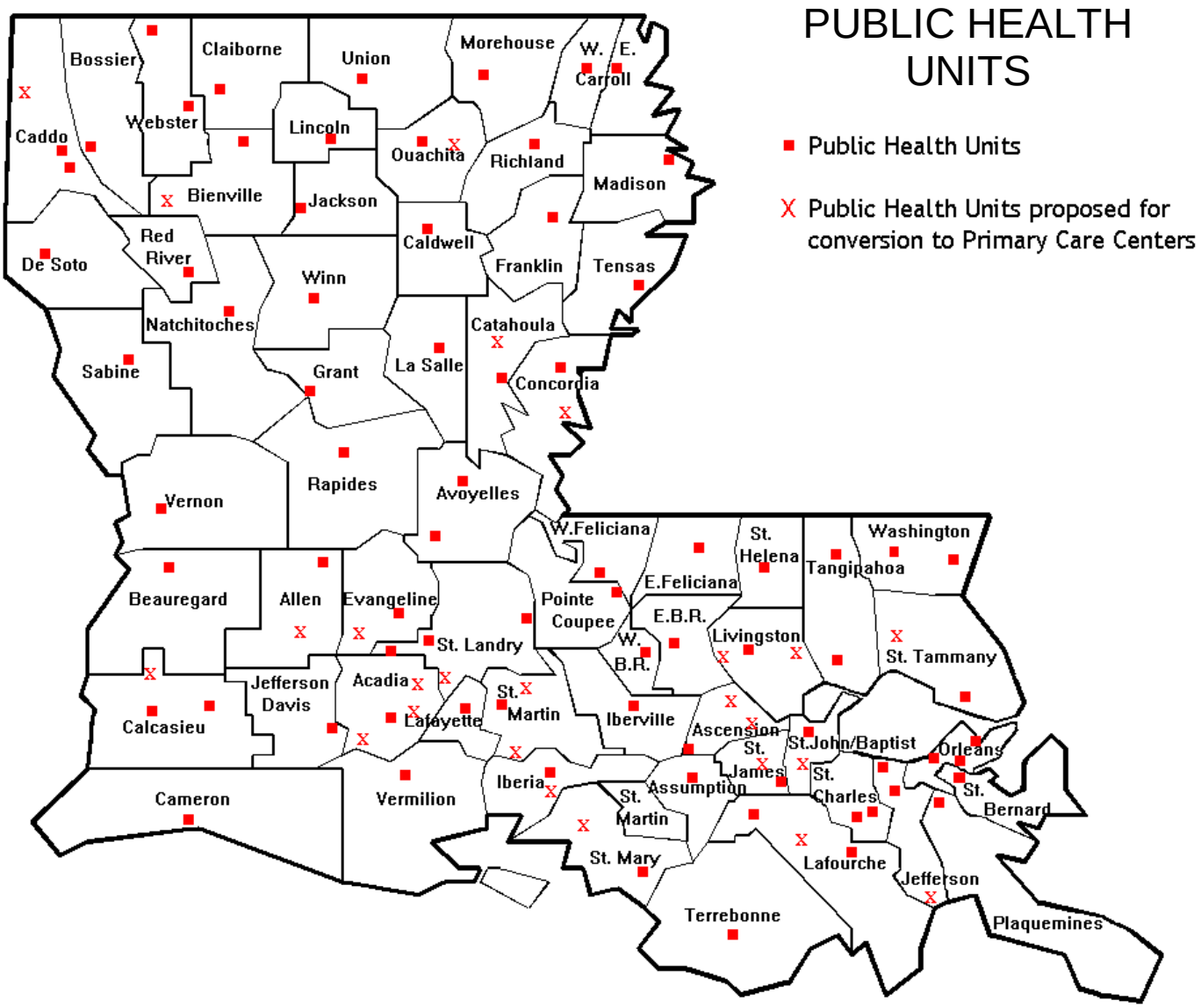
Louisiana has a number of very small rural and community hospitals, some publicly and some privately owned. Eight of the State's sixty-four parishes do not have a hospital. As part of the move toward managed care, some of the small rural hospitals and the charity hospitals have begun to formalize their long-standing links with the primary care clinics in their regions.

In its Rural Health Care Initiative, the State has appropriated money to support small rural hospitals suffering financial distress. This support has taken the form of grants provided to 34 small rural hospitals (less than 60 beds) for a variety of projects. For example, last year the State awarded grants to a number of these hospitals for the purchase of updated emergency room equipment and physician coverage for the emergency room. Without such support, some of these hospitals would have had to close their emergency rooms.

Source: Louisiana Office of Primary Care and Rural Health

Public Health Clinics

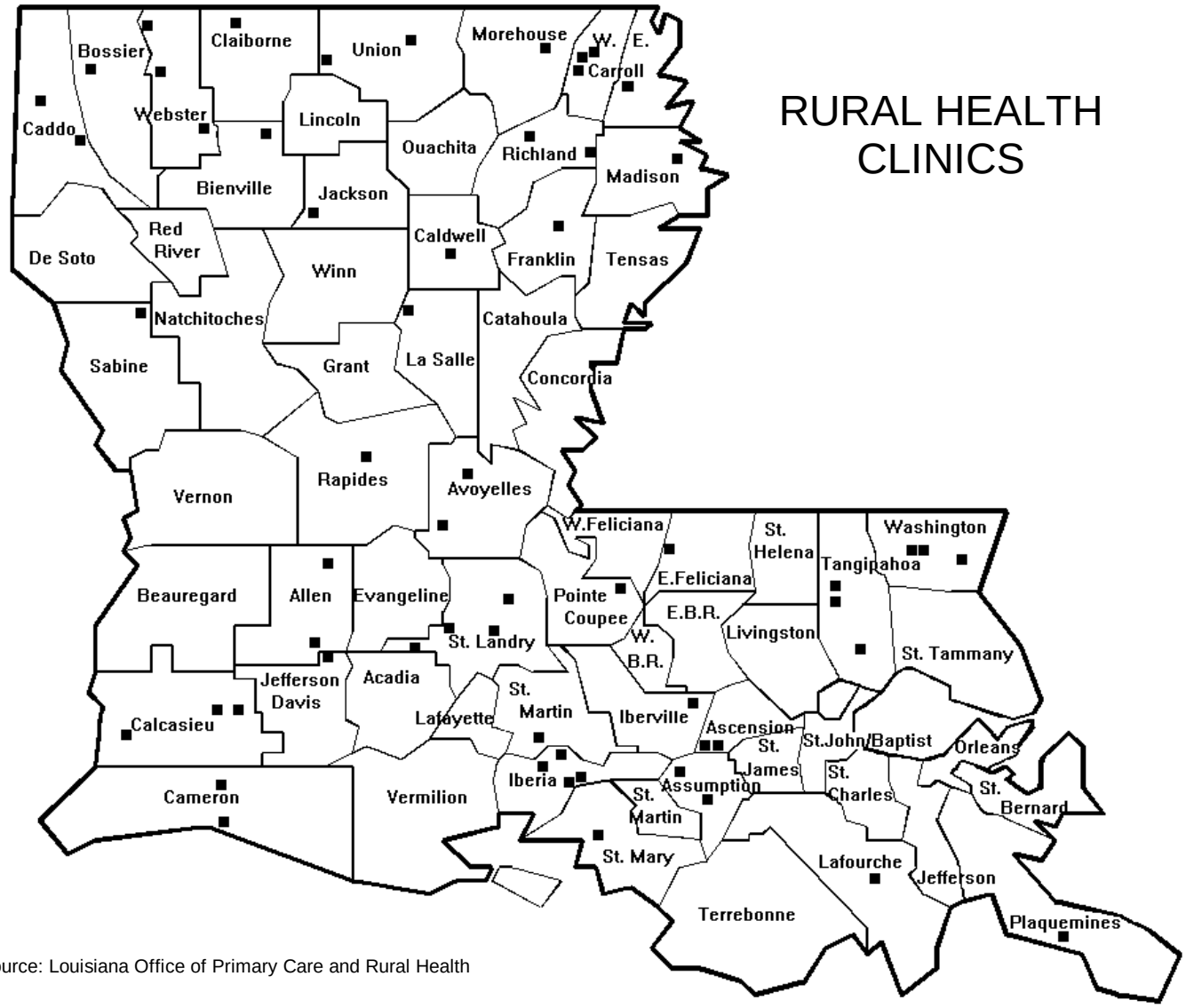
LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH, currently operates parish health units/clinics (see map below) that provide services in the following areas: immunization, family planning, prenatal care, newborn screening for genetic disorders, well-baby care, nutrition therapy, individual nutrition counseling, genetic evaluation and counseling, early intervention services for individuals infected with HIV, health education, and testing and monitoring of infectious diseases (e.g., tuberculosis, sexually transmitted diseases/HIV/AIDS).



Source: Louisiana Office of Public Health, Health Resource Management

Rural Health Clinics

Louisiana has 86 federally designated rural health clinics. These are clinics operating in a rural area designated as "medically underserved" or as a "Health Professional Shortage Area (HPSA)." Rural health clinics must be staffed by one or more physicians and one or more mid-level practitioners, such as physician assistants, nurse practitioners, or certified nurse midwives. Clinics must provide routine diagnostic services, maintain medical supplies, dispense drugs, and have arrangements with local hospitals and other providers for services not available at the clinic.



Source: Louisiana Office of Primary Care and Rural Health

Community Care

Community Care is a system of comprehensive health care based on primary care case management (PCCM). Operating in twenty parishes (see map on following page) under a Medicaid 1915 (b) waiver from the federal government, the program is designed to meet the needs of the rural population. It is a freedom of choice waiver program that must demonstrate cost effectiveness. The program links Medicaid recipients in designated parishes with a physician, clinic, Federally Qualified Health Center (FQHC), or rural health clinic that serves as the primary care physician (PCP).

The PCP may be a family practice doctor, internist, pediatrician, rural health clinic, or federally qualified health center. The PCP has total responsibility for managing all facets of the recipient's health care, including education, prevention, maintenance, and acute care. Referral for specialty services is an integral component of Community Care.

The program is operational in twenty rural parishes in Louisiana, with a total of 47,944 enrolled recipients. There are 142 enrolled providers employing a total of 238 physicians. PCPs are paid a primary care management fee of $3.00 each month for each Community Care recipient for whom they manage care, in addition to the normal fee-for-service reimbursement from Medicaid for services rendered. Without prior authorization or post-emergency authorization from the PCP, Medicaid will not reimburse for services beyond the PCP.

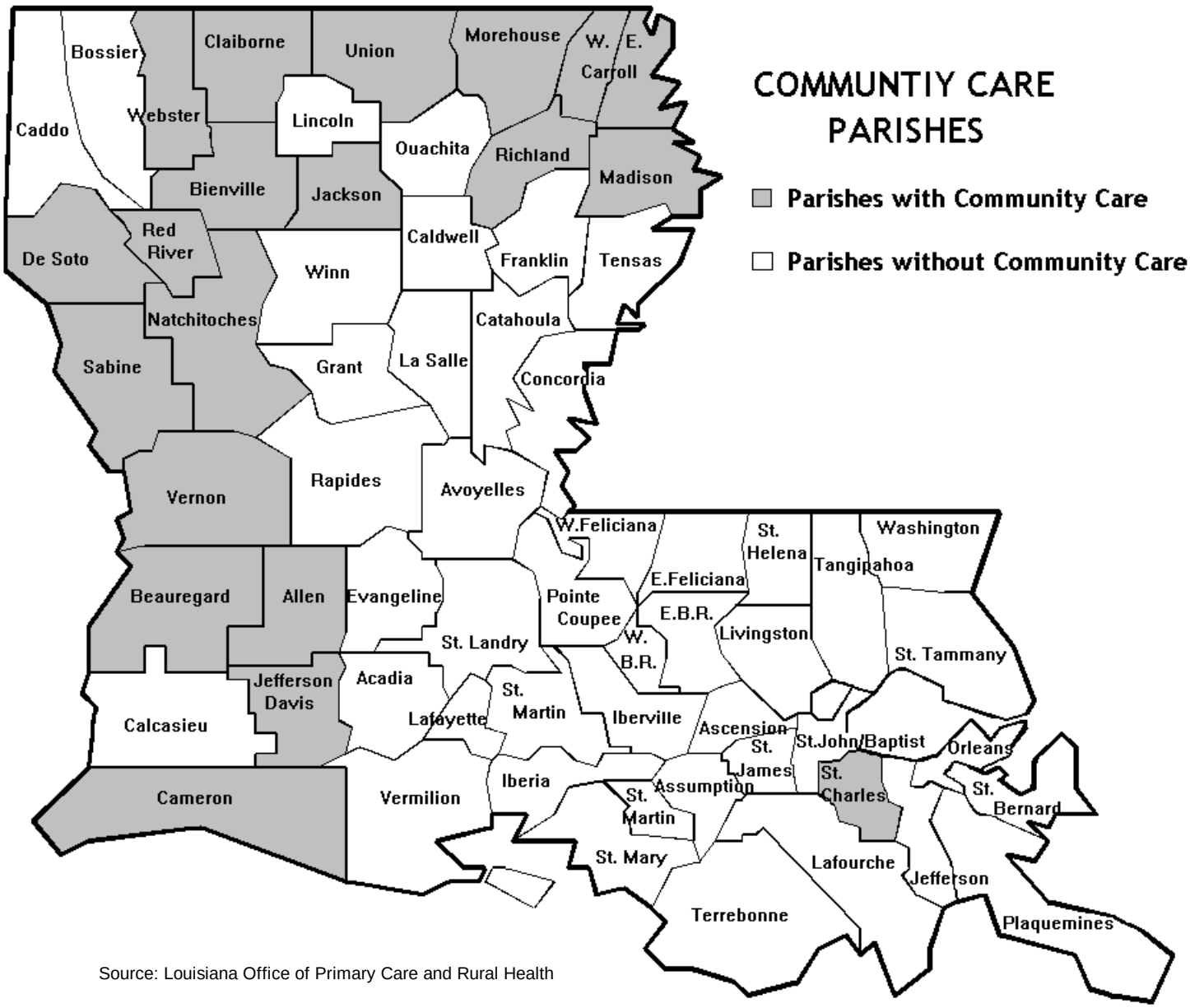
Federally Qualified Health Centers (FQHC)

Louisiana has 12 grantees for community health centers delivering service to 22 sites that are federally supported through grants from the U.S. Public Health Service.

An FQHC (also known as a Community Health Center) is a freestanding health clinic that provides comprehensive preventive and primary care services. In addition to primary care physicians and support staff, FQHC staff may include advanced nurse practitioners, physician assistants, and dentists. Centers also may have social workers or counselors, and there is a growing trend to include psychologists and other mental health and substance abuse professionals. Services most commonly provided at these centers include preventive health services, well-child services, acute care, perinatal care, family planning, diagnostic laboratory and radiological services, emergency medical services, transportation services, preventive and restorative dental services, and pharmaceutical services.

Several of the FQHCs have formed innovative clinic-based health care networks of both publicly and privately owned entities. The clinic itself offers comprehensive primary care services through private physicians and other providers on a contractual basis. The FQHC shares staff with the OFFICE OF PUBLIC HEALTH'S parish health units and receives referrals from them. The staff at the clinics have formal admitting privileges with private hospitals in the network and informal admitting privileges at some of the charity hospitals in their respective areas. The FQHCs also refer patients to the hospital for sub-specialty clinic or inpatient services.

Major health professional education institutions have formal relationships with some of the FQHCs. The relationship involves staffing residents and interns at the clinic for training purposes. Clinic training also is provided to students of a local nursing school and LPN school. Some training also is provided to high school students to encourage them to enter health care professions.

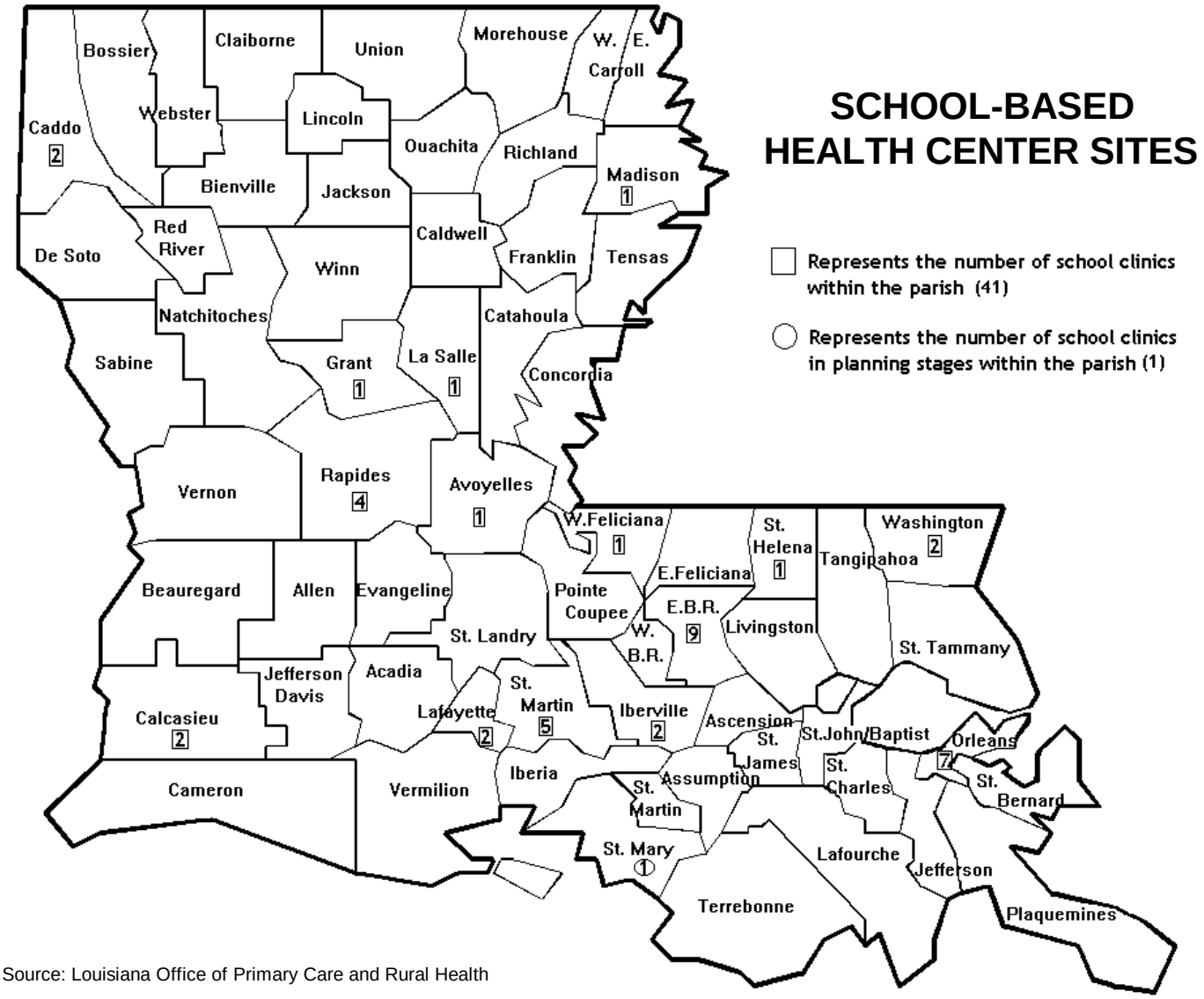


Source: Louisiana Office of Primary Care and Rural Health

School-Based Health Centers

In response to the Adolescent School Health Initiative authorized by the Louisiana State Legislature in 1991, the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH has funded and provides technical assistance to localities for the establishment and operation of full-service health centers in middle and secondary schools (see map below). Currently there are 41 full time sites and 1 planning site. These programs are operated at the local level by a health or education sponsoring agency under contract with the OFFICE OF PUBLIC HEALTH. The State reimburses to each of these centers a portion of their costs.

The centers primarily serve low-income adolescents in rural and medically under-served urban areas. The centers offer primary and preventive physical and mental health care, including health education and counseling services. Each center is staffed at a minimum by a part-time physician, a full-time nurse practitioner or registered nurse with adolescent experience, and a master's level mental health counselor. These centers have been immensely popular with the high-risk adolescent population.



Source: Louisiana Office of Primary Care and Rural Health

Developmental Centers

Services and supports for individuals with mental retardation and developmental disabilities are provided by private provider agencies through contractual agreements, as well as through Louisiana's nine Developmental Centers, which provide 24-hour care and active treatment (see map below). The broad range of services provided includes case management, diagnosis and evaluation, early intervention/infant habilitation, respite, family support, vocational and habilitative services, and residential services (community homes, supervised apartments, and supportive living).

Source: Louisiana Office of Primary Care and Rural Health

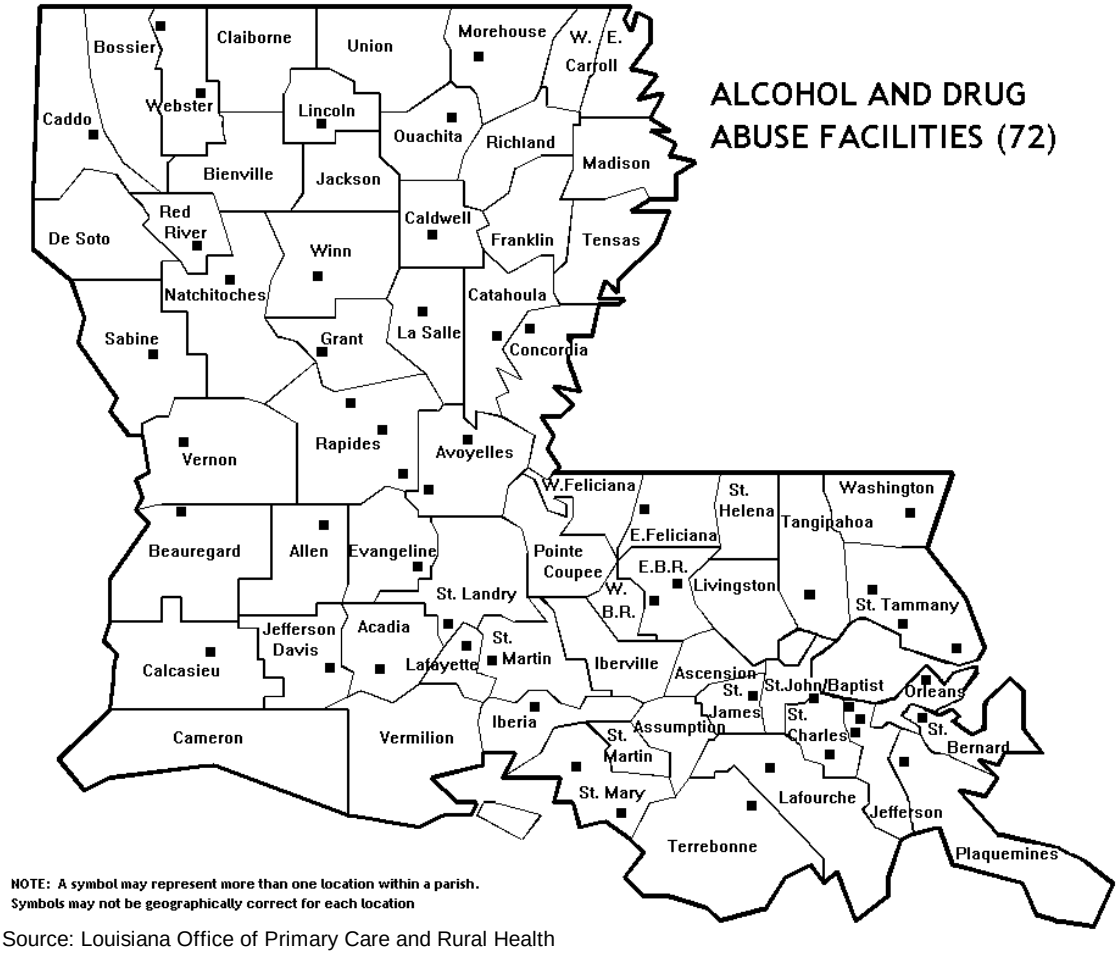
Mental Health Clinics

LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF MENTAL HEALTH, either directly or through partnerships with private and university resources, provides an array of community-based and hospital-based services, the range of which is consistent with national models for public mental health care for individuals with serious mental illnesses. Statewide there currently are 43 community mental health centers, 33 outreach sites, 7 acute treatment units, 5 intermediate/long-term care hospitals, and 1 forensic hospital (see map below). Major service components include crisis response programs, assertive community treatment, family or consumer respite care, traditional clinic-based services, community forensic interventions, hospital-based inpatient intensive and intermediate units, case management, and rehabilitative services.

Source: Louisiana Office of Primary Care and Rural Health

Substance Abuse Prevention Clinics

LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS, through contracts or through an array of community-based and residential programs, provides services and continuity of care for the prevention, diagnosis, treatment, rehabilitation, and follow-up care of alcohol and other drug abuse diseases (see map below). This system is composed of 9 treatment delivery regions, 27 outpatient clinics, 23 satellite clinics, 4 detoxification centers, 8 residential facilities, and 1 pre-release program for adult incarcerated substance abusers.



Source: Louisiana Office of Primary Care and Rural Health

Existing Health Maintenance Organizations

Louisiana currently has 14 licensed health maintenance organizations operating in the State. Under State insurance law, an HMO is defined as any plan delivering basic health benefits for a prepaid fee. Most of the State's HMOs are composed of independent physicians practicing alone or in small medical groups. According to *Health Care State Rankings 1999* [6], as of 1998, approximately 723,280 (16%) Louisianians were enrolled in health maintenance organizations.

In addition to HMOs, the LOUISIANA MANAGED HEALTH CARE ASSOCIATION lists as members preferred provider organizations (PPOs) and several physician hospital networks (PHOs) operating in the state.

[6]Morgan, K.O. and Morgan, S. (Eds.) 1999. Health Care State Rankings 1999: Health Care in the 50 United States. (6th Ed.) Lawrence, KS: Morgan Quitno Press.

G. Inventory of Providers

Number of Primary Care Physicians by Specialty and Parish Louisiana, 2001							
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total
Acadia	14	4	0	6	3	4	31
Allen	5	1	0	4	0	3	13
Ascension	12	6	0	12	0	3	33
Assumption	5	2	0	0	0	0	7
Avoyelles	7	5	0	3	0	0	15
Beauregard	7	1	0	4	3	1	16
Bienville	1	0	0	1	0	0	2
Bossier	20	2	0	29	8	10	69
Caddo	75	9	2	231	55	81	453
Calcasieu	55	8	0	71	28	24	186
Caldwell	3	1	0	3	0	0	7
Cameron	1	0	0	1	0	0	2
Catahoula	2	1	0	2	0	0	5
Claiborne	9	1	0	1	0	1	12
Concordia	4	2	0	5	2	0	13
DeSoto	1	3	0	1	1	1	7
East Baton Rouge	91	46	1	209	91	97	535
East Carroll	2	1	0	3	0	1	7
East Feliciana	4	8	0	1	1	0	14
Evangeline	4	8	0	10	4	3	29
Franklin	3	0	0	1	0	1	5
Grant	2	1	0	0	1	0	4
Iberia	18	10	0	13	8	11	60
Iberville	8	2	0	8	1	3	22
Jackson	1	0	0	4	0	1	6
Jefferson	59	28	5	364	109	129	694
Jefferson Davis	3	5	0	8	3	2	21
Lafayette	39	20	0	99	42	39	239
Lafourche	24	9	0	22	11	7	73
LaSalle	2	2	0	3	0	0	7
Lincoln	7	2	0	11	3	4	27
Livingston	8	1	0	0	0	1	10
Madison	0	2	0	1	0	1	4
Morehouse	7	5	0	6	3	2	23
Natchitoches	6	4	0	9	4	6	29
Orleans	66	30	3	449	116	206	870
Ouachita	43	17	1	80	23	35	199
Plaquemines	2	2	0	2	0	0	6
Pointe Coupee	9	3	0	2	1	0	15
Rapides	43	3	0	69	20	28	163
Red River	1	1	0	1	0	1	4
Richland	7	2	0	4	2	0	15
Sabine	4	2	0	5	0	1	12
St. Bernard	1	3	0	17	3	4	28
St. Charles	4	1	0	4	1	5	15
St. Helena	3	2	0	0	0	0	5
St. James	6	1	0	3	1	2	13
St. John	6	1	0	8	4	3	22
St. Landry	22	8	0	20	11	13	74
St. Martin	6	1	0	1	0	0	8
St. Mary	13	2	0	7	7	4	33

Number of Primary Care Physicians by Specialty and Parish Louisiana, 2001							
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total
St. Tammany	34	13	1	127	35	54	264
Tangipahoa	21	5	0	23	9	11	69
Tensas	0	2	0	0	0	0	2
Terrebonne	9	8	0	31	15	15	78
Union	1	3	0	4	0	0	8
Vermilion	5	5	0	5	2	5	22
Vernon	2	3	0	10	1	2	18
Washington	11	8	0	10	2	3	34
Webster	10	4	0	5	3	2	24
West Baton Rouge	3	0	0	1	0	1	5
West Carroll	1	1	0	3	0	1	6
West Feliciana	3	2	0	3	0	1	9
Winn	2	3	0	2	0	1	8
Total	847	336	13	2042	637	834	4709

Source: Louisiana Board of Medical Examiners, January 2001

Selected Mental Health Professionals by Parish Louisiana, 2001		
Parish	Psychiatrists	Social Workers*
Acadia	2	7
Allen	0	5
Ascension	1	18
Assumption	0	1
Avoyelles	0	10
Beauregard	0	6
Bienville	0	2
Bossier	3	30
Caddo	42	151
Calcasieu	14	86
Caldwell	0	2
Cameron	0	0
Catahoula	0	0
Claiborne	0	2
Concordia	0	4
DeSoto	1	4
East Baton Rouge	48	541
East Carroll	0	1
East Feliciana	4	12
Evangeline	0	2
Franklin	0	0
Grant	0	4
Iberia	2	15
Iberville	1	10
Jackson	0	3
Jefferson	68	357
Jefferson Davis	1	4
Lafayette	23	165
Lafourche	2	23
LaSalle	0	1

Selected Mental Health Professionals by Parish Louisiana, 2001		
Parish	**Psychiatrists**	**Social Workers***
Lincoln	1	14
Livingston	0	24
Madison	0	2
Morehouse	0	2
Natchitoches	2	14
Orleans	173	719
Ouachita	18	94
Plaquemines	2	3
Pointe Coupee	0	2
Rapides	22	115
Red River	0	2
Richland	0	4
Sabine	0	1
St. Bernard	0	13
St. Charles	2	15
St. Helena	0	1
St. James	1	4
St. John	0	11
St. Landry	1	22
St. Martin	0	3
St. Mary	0	8
St. Tammany	34	186
Tangipahoa	3	58
Tensas	0	0
Terrebonne	7	32
Union	0	9
Vermilion	1	14
Vernon	1	6
Washington	2	13
Webster	0	8
West Baton Rouge	0	2
West Carroll	0	1
West Feliciana	0	9
Winn	0	2
Total	482	2879

*Licensed and residing in Louisiana. Social workers are not required to have a license to work in Louisiana through contract or in private practice.

Sources: Louisiana Board of Medical Examiners, January 2001

Louisiana Board of Certified Social Work Examiners, 1998-1999

H. HEALTH PROFESSIONAL SHORTAGE AREAS (HPSA)

Health Professional Shortage Area (HPSA) designations identify areas, populations, or facilities where a lack of providers poses serious barriers to adequate health care. The equitable geographic distribution of health care resources has long been recognized as a problem in the United States, and particularly in the state of Louisiana. Adequate access to health services for all citizens is an important objective of current state and federal policy. Availability of an adequate supply and distribution of health professionals is essential to the ability to access basic health care services, regardless of ability to pay. The redistribution of the supply of health professionals, particularly primary care providers, through the designation of health professional shortage areas (HPSAs) is one method used to attain this goal.

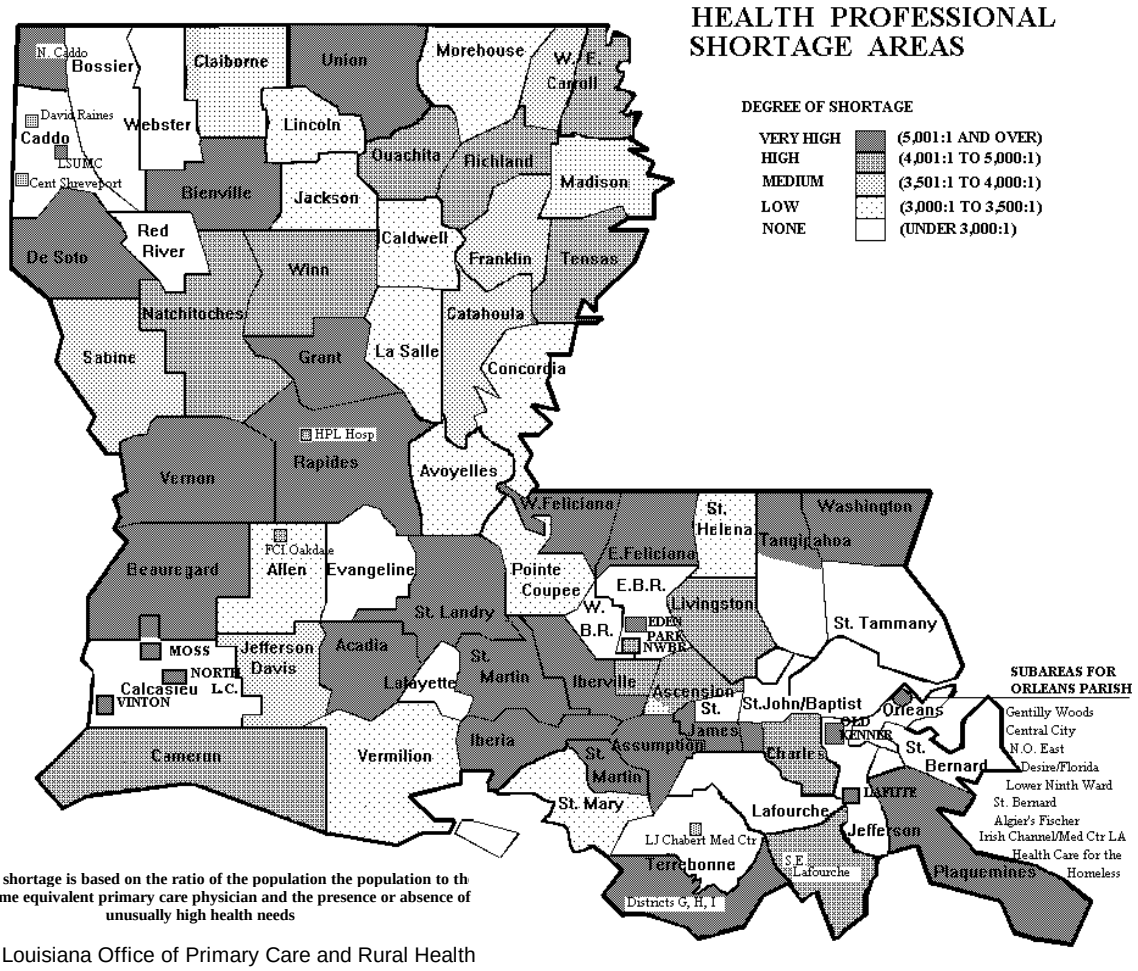
HPSA designations are used to create incentives to improve the distribution and the number of primary care providers in the most critical shortage areas. The HPSA designation methodology was developed to determine exactly where shortages exist, in order to define those areas eligible for participation in the incentive programs. There are approximately 40 federal programs utilizing HPSA designations, some of which are listed below.

Designation requests and reviews are the responsibility of the DHH, OPH, HEALTH RESOURCE MANAGEMENT staff. After review and analysis, the designation studies and recommendations are forwarded to the DIVISION OF SHORTAGE DESIGNATION in the FEDERAL BUREAU OF PRIMARY HEALTH CARE for determination. Designations of Medically Underserved Areas (MUA) or Medically Underserved Populations (MUP) also provide opportunities for improved distribution of health care resources and improved access. The designation process is similar to the HPSA process described previously.

The following are examples of federal programs utilizing HPSA designations:

- Department of Family Medicine
- Grants to Predoctoral Training in Family Medicine
- Grants for Residency Training in General Internal Medicine/General Pediatrics
- Grants for Physician Assistant Training Program
- Grants for Preventive Medicine Training
- Nurse Practitioner and Nurse-Midwifery Programs
- Nurse Anesthetist Traineeships
- J-1 Visa Waiver Program
- Community and Migrant Health Program
- Grants for Graduate Training in Family Medicine
- Grants for Predoctoral Training in General Internal Medicine/General Pediatrics
- Rural Health Programs
- State Health Programs
- Allied Health Traineeships
- Allied Health Project Grants
- Professional Nurse Traineeships

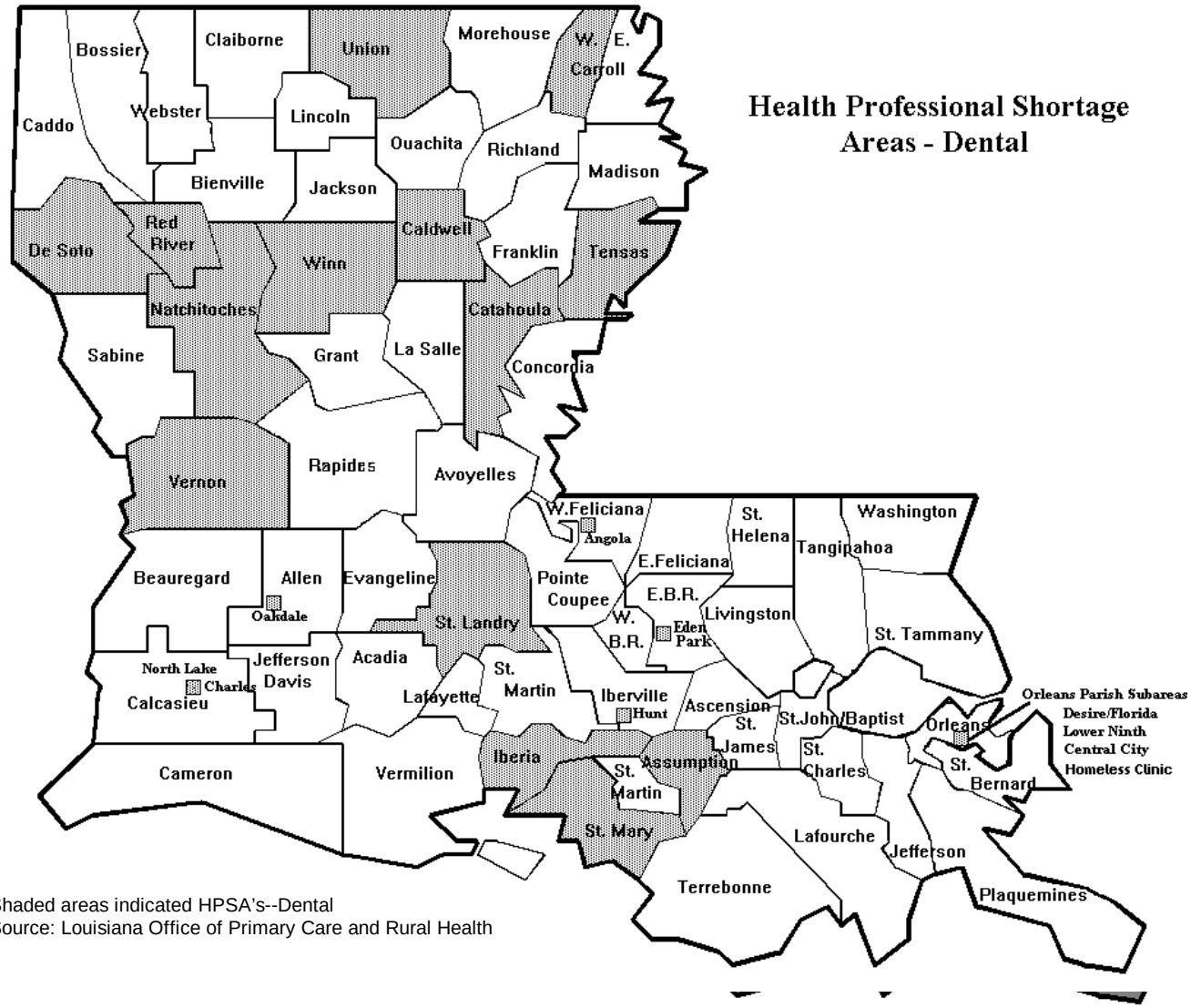
- Grants for Nurse Anesthetist Faculty Fellowships
- 10% Medicare Bonus Program National Health Service Corps
- Grants for Faculty Development in Family Medicine
- Grants for Faculty Development in General Medicine/General Pediatrics
- Grants for Physician Assistant Faculty Development
- Podiatric Primary Care Residency Training
- Advanced Nurse Education
- Nurse Anesthetist Education Program
- Residency Training and Advanced Education in the General Practice of Dentistry



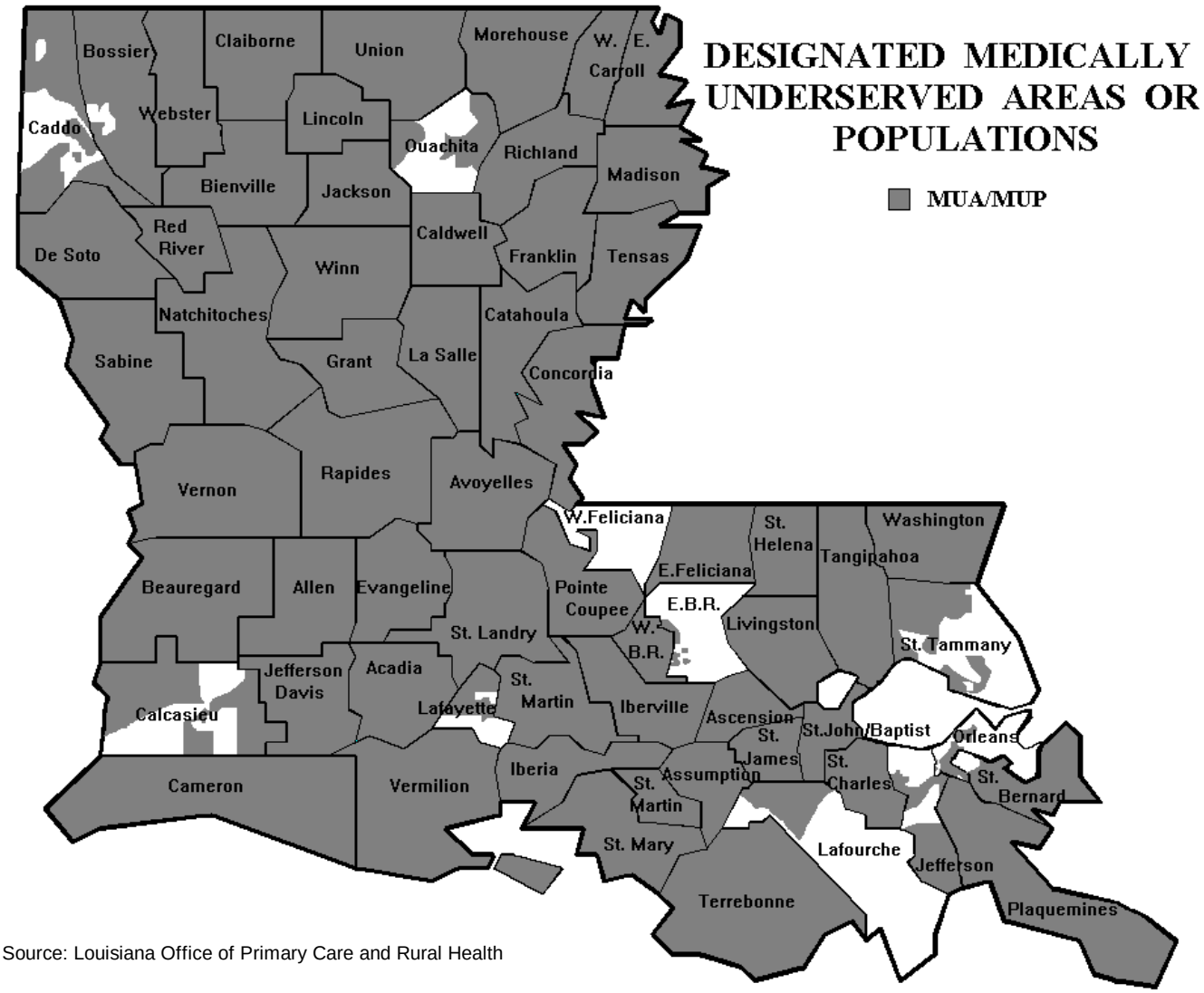
Degree of shortage is based on the ratio of the population the population to th one full-time equivalent primary care physician and the presence or absence of unusually high health needs

Source: Louisiana Office of Primary Care and Rural Health

Shaded areas indicated HPSA's--Mental
Source: Louisiana Office of Primary Care and Rural Health



Shaded areas indicated HPSA's--Dental
Source: Louisiana Office of Primary Care and Rural Health



Source: Louisiana Office of Primary Care and Rural Health

VI. RECOMMENDATIONS FOR IMPROVING HEALTH STATUS

A. MATERNAL, INFANT AND CHILD HEALTH

Infant Mortality

- Implement the recommendations to reduce low birth weight rates (see next page), since this is a leading cause of infant mortality
- Establish a systematic review of all fetal and infant deaths to gather information for the development of preventive programs
- Carry out public and professional education on risk factors for Sudden Infant Death Syndrome (SIDS)
- Encourage the cessation of smoking and avoidance of second-hand smoke during and after pregnancy
- Monitor status of pregnancy risk factors with the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS) and employ this information in policy development and implementation of appropriate, effective interventions

Child Health

- Provide access to preventive health services, including health screening, immunizations, and parental education, to low income infants and children or others who lack access to such services due to geographic or financial barriers or lack of providers
- Enhance outreach efforts through the Covering Kids Initiative for the LaCHIP Program to increase access to health services by enrollment in LaCHIP.
- Expand health system development efforts to all areas of the state to insure that all children have access to comprehensive health (primary and specialty), mental health, social and education services

Child Abuse and Neglect

- Increase public awareness of child abuse prevention and positive parenting and promote parenting education in communities through the public health units
- Expand home visiting services to families at high risk for child abuse and neglect, utilizing the Healthy Families America Program and the Nurse Home Visiting Model

Health & Safety in Day Care Centers

- Provide expertise and leadership in the development and enhancement of child care standards
- Initiate the development of a coalition of state and local health professionals, government and community agencies, child care providers, and concerned citizens to address health and safety child care issues
- Promote appropriate health and safety measures in child care settings
- Utilize a multi-disciplinary community approach to improve quality of these facilities
- Encourage use of child care health consultants
- Initiate pilot projects to incorporate on-site health services in child care settings
- Encourage/assist child care centers to integrate children with special health care needs into these facilities

Low Birthweight Rates

- Ensure access to prenatal care for all pregnant women, especially those with low incomes, teenagers, and those living in medically underserved areas
- Improve access to prenatal care by promoting and removing barriers to non-traditional obstetrical practitioners in Louisiana (i.e. nurse midwives, nurse practitioners, etc.)
- Reduce substance abuse (including use of drugs, alcohol, and tobacco) among pregnant women through increased funding for public education
- Increase counseling and treatment services for substance-abusing pregnant women
- Increase WOMEN, INFANTS, AND CHILDREN PROGRAM services for pregnant women
- Improve surveillance systems to gather information on risk factors on low birth weight pregnancies
- Increase support for Partners for Healthy Babies, which promotes healthy prenatal behaviors and early prenatal care through media messages and a toll free hotline that links pregnant women with health providers
- Initiate educational programs for health providers and pregnant women on identifying the signs of premature labor
- Analyze data collected in the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS) database to assess preventable risk factors associated with low birth weight and to help identify effective and ineffective elements of existing efforts

Teenage Birth Rates

Facilitate the community's capacity to address teenage pregnancy through provision of information and resources. Various programs successful in reducing teenage pregnancy have accomplished some or all of the following:

- Provide educational enrichment and economic opportunities and strengthen the family
- Involve both the public and the private sectors in developing community-centered, sustainable, collaborative, and adolescent-focused programs
- Encourage age-appropriate sex and family life education at home by parents
- Provide age-appropriate sex and family life education in schools, focusing on abstinence and the delay of sexual activity
- Ensure access to information on safe sex practices and contraceptives
- Provide culturally appropriate, intensive, long-term programs that recognize family and community values
- Utilize a variety of approaches, including adult mentors, peers, and community members with similar backgrounds and experiences
- Utilize multi-disciplinary approaches: involve teachers, health professionals, social workers, and community leaders
- Develop multi-message programs addressing school drop-out, real life options, job exploration, training, placement, and individual and family counseling when necessary

- Provide comprehensive adolescent health clinics that are community-based, school-based, and/or school linked
- Ensure youth involvement in program design, implementation, and evaluation

B. INFECTIOUS DISEASES

Emerging Infections

- Encourage appropriate and judicious use of antibiotics
- Conduct surveillance activities to identify disease trends, drug resistance patterns, and risk factors for acquiring infections
- Develop appropriate statewide guidelines for the prevention, surveillance, diagnosis, treatment, and transfer of patients between health care facilities, for infection control, and for outbreak management
- Provide education and information to the public regarding newly emerging, re-emerging, and drug resistant infections, including the importance of limiting inappropriate antibiotic use

Hepatitis A

- Continue to inspect food establishments for proper sanitary procedures, including food handling, storage, preparation, and personal hygiene
- Continue to search for active cases of hepatitis A in order to identify outbreaks and provide preventive treatment
- Encourage the use of hepatitis A vaccine in specific high-risk groups, such as overseas travelers
- Provide health consultation and education to child care providers in out-of-home child care settings regarding hepatitis A, its mode of transmission, and its prevention
- Provide education and information to the public regarding hepatitis A

Hepatitis B

- Vaccinate all newborns and early adolescents to prevent hepatitis B infection
- Vaccinate high-risk group, including household contacts of hepatitis B carriers, to prevent hepatitis B infection
- Continue to search for active cases of hepatitis B to identify contacts at risk
- Provide education and information to the public concerning hepatitis B

Influenza

- Increase immunization with influenza vaccine among the high-risk groups, especially individuals over age 65 years, by increased education of health care providers and the public
- Continue active surveillance for influenza cases each year in order to inform health care providers and the public about the proper time to be immunized each fall
- Work with community groups who already reach poorly-immunized groups to increase awareness of the benefits of influenza prevention

Tuberculosis

- Continue the practice of directly observed therapy (DOT) to ensure completion of therapy
- Expand surveillance for TB through liaisons with hospital infection control practitioners and private medical groups in high-incidence areas
- Enhance the capacity to provide field-based outreach and ensure thorough case and contact follow-up
- Ensure that the in-patient treatment facility at Villa Feliciana remains a treatment option for drug-resistant, recalcitrant, or other TB patients who require close supervision of therapy
- Assure prompt medical assessment of those foreign-born persons entering the state with evidence of TB

Sexually Transmitted Diseases and HIV/AIDS

- Encourage condom use among persons with more than one sexual partner and increase distribution of and accessibility to condoms
- Provide STD and HIV testing and counseling, group educational sessions, and outreach to persons at high risk for STDs and HIV/AIDS
- Increase access to clinical services for STDs to ensure rapid treatment and thereby reduce spread of STDs and vulnerability to HIV
- Enhance partner notification activities for syphilis and HIV/AIDS
- Continue support for public awareness and professional education regarding HIV/AIDS in pregnant women and the effective use of AZT in preventing perinatal transmission

C. ORAL HEALTH

- Continue to strengthen the fluoridation program infrastructure within the OFFICE OF PUBLIC HEALTH
- Continue to promote expansion of community water systems that adjust water fluoride level to optimal range for reduction of dental caries
- Ensure continuous proper monitoring of all public water systems that fluoridate, and provide technical assistance for all public water systems operators
- Provide education to the public, policymakers and dentists regarding optimal water fluoridation status in Louisiana
- Assess utilization of dental pit and fissure sealants among third grade school children attending Louisiana public schools
- Provide education to the public, policy makers and dentists regarding current pit and fissure sealant utilization rates among populations at high risk for dental caries
- Increase access to pit and fissure dental sealants among school children in Louisiana
- Provide referral list of dentists in the private sector willing to treat special needs population

D. Chronic Disease

Cancer

- Advocate cessation of tobacco use
- Encourage avoidance of second-hand smoke exposure
- Promote increased consumption of fruits, vegetables, and grains and reduction of fat in diet
- Promote increased regular physical activity and maintenance of optimal weight
- Advocate routine Pap smears for detection of cervical cancer in women 18 and older
- Advocate mammograms at least every two years for women over 50, and for women 40-49 with a mother, sister, or child who had breast cancer
- Encourage yearly colon cancer screening tests for women and men over 50

Heart Disease/Stroke

- Advocate cessation of tobacco use
- Encourage avoidance of second-hand smoke exposure
- Promote increases in fruit, vegetable, and grain intake and reductions in fat in diet
- Promote increased regular physical activity
- Encourage maintenance of optimal weight levels
- Advocate blood pressure checks every two years
- Advocate blood cholesterol level tests every five years (if over 35)
- Support discussion of estrogen replacement therapy with a physician for post-menopausal women

Diabetes

- Advocate maintenance of optimal weight levels and physical activity
- Increase intake of fruit, vegetables, and grains while reducing fat in diet
- Promote working continuously with a physician to control blood sugar levels and monitor hemoglobin A1c through regular testing
- Encourage adoption of healthy lifestyles
- Advocate maintenance of normal blood pressure and cholesterol levels
- Encourage annual retinal exams
- Promote daily inspection of feet

E. Alcohol, Drug, and Other Addictions

Prevention

- To transition into research-based prevention programs, statewide.

- To maintain the sale of tobacco products to minors at a 10% or lower non-compliance rate, through the Synar Program
- To implement the CENTER FOR SUBSTANCE ABUSE Prevention's State Incentive Grant to empower the Governor with enhanced capability to coordinate, enforced, and integrate effective prevention strategies into the State's Prevention Plan for its citizens
- To develop and implement a compulsive gambling prevention curriculum in the school system statewide

Treatment

- To improve data collection methodology/Management Information System for Drug Court Programs, in order to evaluate the system and improve effectiveness of program delivery
- To provide a comprehensive array of prevention and treatment services to meet the needs of problem and compulsive gamblers
- To develop recovery homes and therapeutic community models as part of the community-based treatment continuum

F. UNINTENTIONAL INJURIES

- Provide resources for surveillance of non-fatal injuries through mechanisms such as Emergency Department surveillance or Emergency Medical Services data collection
- Make smoke detectors readily available to high risk populations such as the elderly and low income households
- Support mandatory bicycle helmet policies
- Provide resources for injury prevention programs commensurate with the cost of caring for injury – hospital care, permanent disability, and potential years of life lost
- Provide resources to track and assure active and egalitarian support of DWI policies.

G. VIOLENT DEATHS

Violence

- Support policy which requires reporting of weapons-related injury in the state
- Support public policy requiring the purchase of trigger locks at the time of firearm purchases
- Support policy and resources to educate the public about methods to reduce firearm injuries and deaths.
- Support policy and resources to reduce the harm of children witnessing violence.

Child Death

- Assist local communities throughout the state to establish child death review panels
- Provide training, consultation, and support to local panels
- Conduct training conferences for investigating agencies
- Reimburse coroners for autopsies of children

- Enhance prevention by a broader dissemination of the Child Death Review Panel's findings and the development of activities to prevent child abuse and to promote supervision of children around roadways and water, use of car safety seats and smoke detectors, and provision of safe sleeping environments for children, including putting infants to sleep on their backs

H. MENTAL HEALTH

- Assure the provision of a system of mental health services, based on best practices, which is responsive to the assessed and self-identified needs of consumers, families, and the communities in which they live
- Provide the greatest impact on the quality of life for individuals within our care
- Provide quality services that are most cost effective
- Provide person-centered care to meet the individual's and family's needs
- Provide a continuum of services in collaboration with multiple stakeholders
- Decrease the stigma associated with mental illness by increasing public education efforts
- Enhance consumer and family participation in the planning, delivery, and monitoring of services and settings, especially concerning suicide issues
- Focus education efforts on the depressed consumer, impulsive adolescent, student populations, elderly, homeless, and the chronically mentally or physically ill consumer
- Treat each person served by the mental health system in a holistic manner with services tailored to meet their individual needs
- Educate and train all physicians to recognize the signs and symptoms of persons with mental illness and/or at risk for suicide, so that appropriate referrals can be made and/or intervention measures can be taken.

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Contact Information

For more information, please contact
the Louisiana Department of Health & Hospitals
or visit our site on the World Wide Web

Home page address:

www.dhh.state.la.us

LOUISIANA DEPARTMENT OF HEALTH & HOSPITALS	(225)342-9509	www.dhh.state.la.us
Office for Addictive Disorders	(225)342-6717	www.dhh.state.la.us/OADA/index.htm
Office for Citizens with Developmental Disabilities	(504)342-0095	www.dhh.state.la.us/OCDD/index.htm
Office for Community Services	(225)342-2297	www.dss.state.la.us/offocs/index.htm
Office of Mental Health	(504)342-9238	www.dhh.state.la.us/OMH/index.htm
Office of Public Health	(504)342-8093	www.dhh.state.la.us/OPH/index.htm
Children's Special Health Services	(504)568-5330	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*
Chronic Disease Control	(504)568-7210	www.dhh.state.la.us/OPH/chrondis/default.htm
Environmental Epidemiology & Toxicology	(504)568-8537	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Family Planning	(504)568-5330	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*
Health Resources Management	(504)342-4764	www.dhh.state.la.us/OPH/progsvc.htm then select *Community Health*
HIV/AIDS	(504)568-7524	www.dhh.state.la.us/OPH/hivstd/default.htm
Immunizations	(504)483-1900	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Infectious Epidemiology	(504)568-5005	www.dhh.state.la.us/OPH/infectepi/default.htm
Injury Research & Prevention	(504)568-2509	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Maternal & Child Health	(504)568-5073	www.dhh.state.la.us/OPH/mch/default.htm
Oral Health	(504)568-7706	www.tulane.edu/~oralhlth/oral.htm
Sexually Transmitted Diseases	(504)568-5275	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
State Center for Health Statistics	(504)568-5458	www.dhh.state.la.us/OPH/statctr/default.htm
Tuberculosis	(504)568-5015	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Vital Records Registry	(504)568-8353	www.dhh.state.la.us/OPH/vital/index.htm
Women's Preventive Health Program	(504)599-1072	-----
Women, Infants, & Children (WIC) Nutrition Program	(504)568-5065	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*

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